



PHD

**Who Got What from Social Policy Reforms in Mexico?**

**The Redistributive Potential of Changes in the Tax/Benefit System Between 1994 and 2012**

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*Award date:*  
2015

*Awarding institution:*  
University of Bath

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# **WHO GOT WHAT FROM SOCIAL POLICY REFORMS IN MEXICO? THE REDISTRIBUTIVE POTENTIAL OF CHANGES IN THE TAX/BENEFIT SYSTEM BETWEEN 1994 AND 2012**

Submitted by

**RICARDO VELAZQUEZ LEYER**

A thesis submitted for the degree of Doctor of Philosophy  
University of Bath  
Department of Social & Policy Sciences  
October 2014

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## Acknowledgements

This thesis would not have been possible without the support and advice of my supervisor Dr Theo Papadopoulos. His support and intellectual guidance has allowed me to grow as an academic, and I am certain that all my future work will be influenced by the many hours spent in his office engaging in fruitful discussions on my thesis and other much more important topics.

I would like to acknowledge the financial support of the University of Bath and the *Consejo Nacional de Ciencia y Tecnologia* (CONACyT) of Mexico, which gave me the opportunity of embarking in my doctoral studies. Without that support, none of this would have been possible.

I wish to thank my two examiners, Prof Jonathan Bradshaw and Dr Susan Harkness for their insightful and encouraging comments about my thesis.

I would also like to express my gratitude to Dr Emma Carmel, my second supervisor and director of studies for most of my degree, who always provided much valuable and needed support, and to Prof Paul Gregg, my second supervisor during the last year, who offered timely expert advice to help me complete the thesis. I thank the support of Prof James Copestake and Dr Jason Hart, directors of studies during the last part of my degree. Thanks also to Hedley Bashforth, who taught me how to teach Social Policy, and to Ana Bullock, my programme administrator for more than three years, for her patience and understanding.

I am also grateful to Prof Armando Barrientos, from the University of Manchester, for his help and support in my academic and professional careers during the last ten years, to all my former colleagues, supervisors and friends at the *Instituto Mexicano del Seguro Social* (IMSS), especially Mariano Acosta Garza, Silvia Oscura Blancas and Rosa Inés González.

I also thank José Di Bella, Regine Paul, Juan Pablo Ferrero, Daniela Bressa, Leslie Wehner, Dimitris Pantoulas, Josie Millar, Ludek Stavinoha, Karlijn Van Den Broek, Hannah Durrant, Tim Williams, Luke Martinelli and all other friends who I met at the University of Bath.

Special thanks to Katerina Papadopoulou, for her love, care and friendship during my life in Bath. Finally, to all my family and good friends in Mexico and everywhere else, where they may be.

I dedicate this thesis to my parents and my grandparents.

## Declaration

Different parts of this thesis have been presented at the following conferences, among others:

- ‘Corporatism, Institutions and Social Policy in Mexico’, Society for Latin American Studies (SLAS) Annual Conference, Birkbeck, University of London, April 2014
- ‘The Transformation of Mexican Social Policy’, First International Congress of the Mexican Political Sciences Association (AMECIP), Universidad de Guanajuato, August 2013
- ‘The Redistributive Effects of Neoliberal Social Policy Reforms in Mexico’, Social Policy Association (SPA) Annual Conference 2013: Social Policy in Challenging Times, University of Sheffield, July 2013
- ‘Social Policy Responses to the Global Financial Crisis in Brazil and Mexico’, Political Economy Research in Times of Crisis: Methodological Approaches and Challenges, Council for European Studies (CES) Pre-Conference PhD Workshop, University of Amsterdam, June 2013
- ‘Neoliberalism and Postneoliberalism in Latin America: Social Policy in Mexico and Brazil in the Twenty-first Century’, Future directions in International Comparative Social Policy Workshop, University of Bristol, July 2012
- ‘The Development of Housing in Mexico and the Main Features of the Welfare Regime’, Social Science in a Changing World: State, Society and Policy in Perspective Postgraduate Research Students’ Symposium, University of Bath, June 2012
- ‘An Overview of Neoliberal Welfare Reforms in Mexico’, 10<sup>th</sup> Symposium of Mexican Studies and Students, Imperial College London, May 2012

My article ‘The Development of Housing in Mexico: Welfare Mix and Outcomes’ will be published in *Social Policy and Society* in 2015.

## **Abstract**

Social policy has been transformed in Mexico during the last two decades. Social insurance programmes on which welfare provision was based throughout the twentieth century have been retrenched and new social assistance programmes have been introduced and expanded.

This thesis aims to reveal the redistributive potential of these social policy reforms. The research maps the changes in the welfare policy architecture and estimates their vertical and horizontal redistributive effects. The study identifies the winners and losers of the reform process, the specific changes in the structure of the architecture that benefited different population groups and characterises the welfare model that emerged from the reform process.

The research consists on the hypothetical simulation of the effects of changes in the tax/benefit system. The thesis adapts the ‘model families’ method to estimate and compare the effects of taxes and benefits at the household level before and after the reforms.

Findings highlight that the productivist/residual logics adopted in the design of the reforms neglects the welfare of families who do not qualify for social assistance, and results in minimal benefit levels insufficient to raise families above poverty lines. The reforms have reproduced the tax/benefit system’s fragmentation and the unequal levels of protection offered by the state, which block the formation of redistributive coalitions. The outcome is a system of low redistributive potential to reduce high levels of poverty and inequality.

The thesis represents an original contribution at the empirical level, because it provides a comprehensive assessment of recent reforms in terms of the population segments favoured by them; at the methodological level, since it applies the micro-simulation logic to the study of social policy in the country; and at the theoretical level, because it characterises the welfare model that has emerged from the reform process.

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## List of Abbreviations

AFORE	Pensions Funds Administrator
AMWL	Adjusted Minimum Welfare Line
CNPSS	National Commission for Health Social Protection
CONSAR	National Commission for the Retirement Savings System
CROM	Revolutionary Confederation of Mexican Workers
CT	Labour Congress
CTM	Mexican Workers Confederation
EDA	Differentiated Support Scheme
FONHAPO	Popular Housing Fund
FOVISSSTE	Housing Fund for State Workers
INFONAVIT	National Workers Housing Fund Institute
IADB	Inter-American Development Bank
IFI	International Financial Institution
IMF	International Monetary Fund
IMSS	Mexican Social Insurance Institute
IETU	Single Rate Business Tax
ISI	Import-Substitution Industrialisation Model
ISSSTE	State Workers' Social Security and Services Institute
LGS	General Health Law
LISSSTE	Law of the State Workers' Social Security and Services Institute
LSS	Social Insurance Law
LSR	Income Tax Law
MWL	Minimum Welfare Line
PAN	National Action Party
PHI	Popular Health Insurance
PIDER	Public Investment Programme for Rural Development
PRD	Democratic Revolution Party
PRI	Institutional Revolutionary Party
PRONASOL	National Solidarity Programme
PVSCL	Permanent Socioeconomic Conditions Verification Line
SNTSS	National Social Insurance Workers Union

SPS	Popular Health Insurance
SSFAM	Family Health Insurance
UNDP	United Nations Development Programme
WB	World Bank
WL	Welfare Line

# **1. Introduction**

## **1.1. Introduction**

Social policies constitute the main tools that modern societies have devised to fight against poverty and inequality. Along with fiscal policies by which the revenue to fund social benefits and services is raised, they represent redistributive mechanisms that allocate resources among different population groups. This thesis is a study of the redistributive potential of the Mexican tax/benefit system.

The Mexican tax/benefit system has been deeply reformed in recent years. A series of changes have transformed the way the Mexican state intervenes in the field, and new programmes have taken social protection to groups of the population never reached before. The thesis aims to estimate the consequences of these changes for Mexican families and to identify these achievements and shortcomings. This chapter introduces the research, presents its aims and methods; explains its rationale, scope and expected contributions; and lays out the structure of the thesis.

## **1.2. Social Policy in Latin America and Mexico**

The study of Latin American social policy systems is important because of their long history that in some cases predates their introduction in more advanced capitalist countries, because of their relevance for the development of political regimes and economic models since their creation, and because in recent decades the region has become the place where many innovations in social policy have been pioneered (Lavinas, 2013).

The history of social policy in Latin America can be divided in two phases, although as will be explained, the second phase could in turn be divided in two parts. During the first phase, referred to as the development phase in this thesis, which started in the early decades of the twentieth century, social policy was based on stratified social insurance programmes, not unlike those of continental European countries. Social insurance commonly provided healthcare and income maintenance during old-age, illnesses, disability or maternity periods; protection against

unemployment was less frequent, as this was considered to be offered by severance payments mandated in labour legislation. The main difference with European social insurance systems was that in most Latin American countries coverage percentages remained at low levels.

The second phase is marked by a number of reforms that transformed the way social policy is organised and delivered in the region. It has been argued that never before, in no other region, has so much change been undertaken in the social policy field as in Latin America after the 1990s (Barrientos, 2004). It is during this phase, referred to as the reform phase in the thesis, that Latin America became the social policy laboratory of the world (Lavinás, 2013). The reform phase can be divided in two parts. The first part was characterised by the reform of social insurance programmes that in many countries notably included the privatisation of pension systems and the introduction of systems of individual capitalisation. Other typical reforms of the period included the decentralisation of healthcare and education services and the flexibilisation of labour legislation.

The second part of the reform phase can be characterised as the expansion period. At the end of the twentieth century and beginning of the present one, a number of reforms expanded social protection to groups of the population that had been historically neglected. During the development phase, coverage of social insurance programmes had been limited to urban formal sector workers and their families. This meant that with a few exceptions, coverage never surpassed more than half of the population. The expansion of social policy took social benefits beyond this limited group. The expansion was undertaken at different time and took different shapes in each country.

Major conclusions of the research on Latin America have been that the welfare model passed from a corporatist type based on social insurance programmes, like the one of Continental European countries albeit a large informal economy, to a liberal model based with a greater reliance on residual programmes with a strong productivist component, more similar to the model of Anglo-Saxon countries, but still with the presence of a large informal economy (Barrientos, 2009, Barrientos, 2004). It has also been noted that whilst residual programmes have gained centrality, the social insurance and liberal paradigms coexist in the design of social policy, and that the former still represents the largest share of social spending (Franco, 2006).

Other authors have argued that actually different welfare models can be observed in the region, and that greater divergence can be observed in more recent years as some countries enter a post-neoliberal phase with the state regaining importance for welfare provision (Cameron and Hershberg, 2010).

The history of social policy in Mexico follows these same phases but with certain particularities. The main social insurance programmes were introduced in the 1940s, decades later than in other countries in the region, and developed at a slower pace not reaching coverage of 50 per cent of the population until the 1970s. Mexican social insurance was divided in programmes for waged private and public sector workers, the former being much larger and unified with only a few exceptions, and the latter being more fragmented among different categories, although with one core system that covered all federal and many state and municipal civil servants. These social insurance programmes offered basically the same benefits and services, namely healthcare, pensions, incapacity benefits, childcare and notably housing loans, but under distinct conditions and at different benefit levels (e.g. quality and amounts), administered by different government agencies, for different groups of workers and their families. Legal insurance was never extended beyond workers under a formal subordinated employment relation, which meant that the self-employed, peasants and simply workers who did not contribute to the system because their employers avoided the payment of contributions, among others, would never be entitled to social protection. Little was offered to families not covered by social insurance, apart from education, which did achieve coverage of 100 per cent of children in primary school age by the 1970s, and limited healthcare services.

The reform phase began with the government that took office in 1994. In Mexico, the reform of social insurance and the expansion of social assistance would be carried out simultaneously. By that year several Latin American countries had already reformed their social insurance pension systems. This was the first reform that was undertaken in Mexico, approved by Congress in 1995 but enacted in 1997. The social insurance pension system for private sector employees was privatised and the pay-as-you-go system was replaced by a system of individual capitalisation. Additionally, the insurance architecture was rearranged and contribution structures were modified. Later, public workers' pension systems would be reformed along the same lines.



At the same time that the first social insurance reforms were enacted, the creation of the Programme for Education, Health and Nutrition or *Progresa* represented the beginning of the expansion wave of social protection to groups of the population not covered by social insurance programmes. The *Progresa* programme paid cash transfers to poor families conditional on attendance at health checkups by all their members and on school attendance of children. The name of the programme was later changed to *Oportunidades*. This type of programmes that spread rapidly throughout Latin America came to be known as conditional cash transfers (CCTs); the Mexican programme was the first of its kind to be implemented at the national level, since a similar programme in Brazil had already been implemented at the local level (Borges Sugiyama, 2011). CCTs and social insurance pension reforms represented two social policy innovations that would be imitated by countries in many other regions of the world. In Mexico, the expansion of social protection would continue later on with more social assistance programmes for population with no social insurance coverage.

Income tax legislation has also been reformed recently, albeit the most important reform was introduced a few years before the first social policy reforms were adopted. A new income tax law was enacted in the early 1980s and the top marginal rate was reduced from 60 to 35 per cent (Elizondo, 1994). Rates have been modified in several occasions since then, but the top rate has always remained below that 35 per cent.

All these institutional and policy changes in Mexico were undertaken in the context of the processes of economic and political liberalisation that began in the 1980s. From the 1930s until the 1980s the country's political regime was called a hegemonic party regime, because even if elections were held systematically for all political posts, one party occupied a hegemonic position, overwhelmingly controlled all political and economic resources and virtually won every election. The economic model was based on the Import-Substitution Industrialisation strategy, which aimed to promote domestic markets by closing the economy and establishing high tariffs on imports, and a central role assigned to the state on economic planning.

A severe economic crisis affected the country in 1982 and led to the dismissal of the ISI model and the liberalisation of the economy. At the same time, pressures for greater democratisation began to mount and opposition parties slowly began to gain ground, until in 1997 the hegemonic

party lost control of Congress for the first time in 70 years and in 2000 an opposition candidate won the presidential elections. It was in the context of these changes that the transformation of the Mexican social protection architecture was carried out. On Mexican social policy, it has been argued that it has historically had lower level of development than Southern Cone countries, e.g. Chile and Uruguay (Mesa-Lago, 2000, Filgueira and Filgueira, 2002); that along with Brazil, it can be distinguished from those countries because of the presence of a large informal economy (Filgueira and Filgueira, 2002, Filgueira, 1998); and that, like Barrientos argued for the entire region, in recent decades it has passed from a corporatist to a liberal type of residual features and increasing centrality of market arrangements for welfare provision (Dion, 2009, Dion, 2010, Bayón, 2009).

The work of Scott (2013) is relevant for the study of redistribution. This author has carried out several studies since 2006 to estimate the redistributive effects of taxes and social spending across income levels. His findings have shown that the system is redistributive towards low income population; in 2010 cash benefits generated net gains after the payment of taxes for the first three income deciles. On the study of redistribution at the household level, Absalon and Urzua (2011) have started a project to model redistributive effects of taxes and benefits using data from the 2008 national income and expenditure survey. Results were not available at the moment of conducting the data analysis for this thesis; one challenge that these researchers faced was the lack of variables on several social programmes.

The current literature on the Mexican social policy reforms has not identified the changes in the redistributive effects of social policy reforms across families of different composition and labour market attachment. However, the estimation of those effects is considered necessary given the great changes that have transformed welfare provision, but reproduced the fragmented nature of the country's social policy protection system. This thesis aims to fill this gap.

### **1.3. Thesis Aims, Methods and Scope**

This section provides an overview of the thesis. The research seeks to contribute to the literature on Mexican social policy by estimating the redistributive potential of changes in the tax/benefit

system at different points in time. The ultimate goal is to identify successes and shortcomings of recent policy changes in addressing some of the country's main social problems.

### **1.3.1. Aims and Research Questions**

This is a thesis of the redistributive potential of recent social policy reforms in Mexico. As explained above, after a long period that covered most of the twentieth century when social policy was based on social insurance programmes, a number of reforms that started in the mid-1990s have transformed the policy architecture. The initial phase began in the 1940s with the introduction of stratified healthcare and income maintenance programmes that limited their scope to workers in formal employment and their families. During the 1990s, in the context of intense economic and political liberalisation processes, the reforms transformed how social policy is delivered in the country.

The reforms have consisted in the retrenchment of the traditional social insurance programmes and the introduction and expansion of social assistance programmes. At the same time, a series of fiscal reforms have modified the way in which families contribute to fund public policies. The thesis aims to explore and estimate what have been the consequences of these reform processes for the welfare of Mexican families.

The main objective is to establish how the reforms have modified the redistributive potential of the Mexican tax/benefit system. The research is considered necessary to identify the achievements and failures of the changes in the design of public policy adopted in the country during the recent decades. The study will reveal who benefits from social policies and to what extent, considering how much they contribute for the funding of those policies, and what is the potential of the tax/benefit system to redistribute income towards the population that requires support to emerge from or avoid falling into poverty. The ultimate goal is to make not only an original contribution to academic knowledge but to also contribute with evidence-based analysis to the public debate on social policy in Mexico.

The main research question of the thesis is the following:

- 'How did the fiscal and social policy reforms undertaken in Mexico between 1994 and 2012 modify the redistributive potential of the tax/benefit system?

There are three sub-questions as well:

- How were the changes in the system's rules expected to benefit or affect households from different sectors of the population?
- How were changes or continuities in the redistributive potential of the tax/benefit system obtained?
- How can the emerging architecture of the tax/benefit system be characterised?

The study compares the vertical and horizontal redistributive potential before and after the reforms. Vertical redistribution refers to how the state redistributes income across income levels. Horizontal redistribution refers to how the state redistributes income among population groups, and in the case of the present thesis, would correspond to the redistribution that occurs as a consequence of state action, between families of different composition and employment profiles.

### **1.3.2. Research Methods**

The thesis will uncover the redistributive potential of the changes in the system introduced between 1994 and 2012, in terms of the net income of different types of families after the amounts they should pay in taxes and receive in benefits according to the system's rules. By comparing the net gains that each family type would be expected to obtain in each year, the research reveals which types were favoured or affected by the policy changes and to what degree, which specific changes affected or benefited each type of family and finally how have the changes and their redistributive features reconfigured the country's welfare model.

The research is based on using an adaptation of the 'model families' approach (Bradshaw, 1994, Bradshaw and Tokoro, 2014, Eardly et al., 1996, Marx and Nelson, 2013). This technique has been extensively utilised for social policy cross national research for more than three decades. In this thesis it is adapted to compare two moments in time within the same country. 'Model families' consists on the hypothetical simulation of taxes and benefits on family types to estimate their redistributive potential. Family types are meant to be illustrative of the population. The advantages of the approach are that it enhances the extent in which like is compared with like, it allows for comparisons when empirical data is non-existent and it reflects the outputs of the policy-making process.

By applying ‘model families’, the thesis will produce a picture of how the Mexican tax/benefit system functions according to its rules, in order to find out which population groups has public policy intended to favour, and in which way, during the last 18 years. The research will not estimate the effects of the implementation of public policy, which in a country like Mexico can be affected by several factors, among them limited institutional capacity and high levels of clientelism; the study will rather focus on the redistributive features of social and fiscal policy outputs as reformers have designed them.

The ‘model families’, or family types as they are also referred to in the thesis, were selected according to three dimensions that determine the types and amounts of taxes that families pay and the benefits and services they are entitled to receive from the state. These dimensions are income level, family composition and the employment status of the families’ earners. This last dimension is referred to in the thesis as the employment profile of the family type. The study includes income levels set in original earnings expressed in the number of times of the legal minimum wage, from one to 25, the latter because it is the maximum amount at which social insurance contributions are paid and some benefits calculated. Family composition refers to the number and age of household members, and included childless couples, couples with children of different age and households of pensioners; all compositions are assumed to have only one earner, because the Mexican tax/benefit system is individualised, with no special conditions for dual earner families. Employment profiles refer to the labour market segments in which the breadwinners are inserted. There are four profiles relevant for estimating taxes and benefits: employed as a waged worker in the formal private economy, employed in the public sector, self-employed in the formal economy, employed or self-employed in the informal economy.

The Mexican legislation and policy rules determine the taxes that a family should pay and the benefits that it would receive according to the three selected dimensions with one exception. Among employment profiles, people employed or self-employed in the informal economy would corresponds to a segment created *de facto*, not *de jure*. This segment exists because either workers either avoid paying taxes or find themselves being employed by an employer who avoids them. This group is considered as a separate segment in the study because they would still be entitled to benefits from the state, and because in practice they constitute more than half of the employed population (INEGI, 2014a). The situation of the unemployed is not included in the

thesis because by 2012 no federal programme existed to offer income support or maintenance to that group.

### **1.3.3. Research Rationale, Scope and Expected Contributions**

The study of social policy in Latin America is still relatively underdeveloped compared to the amount of attention the field has received in other parts of the world. Despite the fact that the region's social protection systems have a long history, that some Latin American countries introduced welfare policies before some advanced capitalist countries, that today most countries possess fairly comprehensive welfare systems, and that the region has served as the experiment ground for policy innovations that have been imitated around the globe, several authors have noted that there still is a lack of sufficient research on the development, outputs and outcomes of social policies in Latin America (Dion, 2009, Segura-Ubiergo, 2007, Lavinas, 2013).

The relevance of the study of social policy in Latin America is highlighted by the great amount of changes that the fairly well-developed social protection systems have experienced during the last three decades. As has been noted, when it comes to welfare, nowhere else has so much change been carried out as in Latin America during this period (Barrientos, 2004). The primary decision to undertake this thesis stems from the will to complement the existing literature on the effects of social policy changes in Latin America.

Research on Latin American systems of taxes and benefits is still in the development stage (Absalon and Urzua, 2011). Taxes and benefits represent the tools that governments have at their disposal to redistributive income, and therefore to fight against poverty, inequality and the many social problems that come with them. The design of tax/benefit systems has direct consequences on the well-being of families, with a straight impact on their income. Not all fiscal and social policies have redistributive intentions but they all have redistributive consequences, and they all have an impact on the levels of support that the state offers to families and on the welfare of the population.

The design of taxes and benefits shapes the levels of poverty and inequality that prevail in a country. The study of the combined effects of taxes and benefits in Latin America is important to

understand how have the many changes implemented in recent decades impacted families and improved or worsened the region's historic social problems.

The case of Mexico has been selected to conduct the study for three main reasons. First, because of the historic importance of the social protection system for the country's development. Mexico is the second largest of the region and its size is reflected on the dimension of its social protection system. If the allegedly covered population by all its various components is added up (e.g. IMSS, ISSSTE, *Oportunidades*, Popular Health Insurance), the Mexican welfare system could be one of the largest in the world. Even if the social insurance system for private sector workers (IMSS) covers only half of total population, which amounts to approximately 50 million people, it would still be larger than most European social insurance systems. Given the size of the social protection system, it is considered necessary to further investigate its effects on the welfare of the population.

Secondly, because of the great changes that have transformed the way the state organises welfare provision. Some of these changes in fact represent innovations that have been imitated in many countries of Latin American and beyond. It is therefore considered important to investigate the effects of these changes not only to assess the Mexican reforms, but also to offer a guide on the design of social programmes and their expected redistributive effects for countries that attempt similar reforms.

Thirdly, because of the high levels of poverty and inequality that affect the country. It is considered that a better understanding of how the social protection system has been functioning is needed to discern the reasons behind the persistent high levels of poverty in the country. The analysis of the architecture of the tax/benefit system is necessary to reveal its failures and achievements and to identify areas of opportunities where the system can be improved to enhance its potential to fight poverty and inequality.

The scope of the study are policies implemented at the national level, which is the federal level. Mexico is a federal country and local governments, whether state or municipal, have the faculty to introduce and administer some taxes and social benefits. Although the activity of state and municipal governments has been increasing in recent decades, federal policies have the strongest impact on the population, as they cover the entire country and represent by far the largest share

of public spending. All social insurance and the main social assistance programmes in the country are administered by the federal government, although social insurance programmes also include in their administration labour and employer representatives.

The social programmes covered in the study are those delivered to the population as a right established in the federal government's normative framework, either as social insurance or social assistance programmes, within five policy areas: healthcare, pensions, work, family benefits and housing. These are the areas commonly associated with social protection. Education is the only service in the country that is universal, and although sometimes it is not linked to the study of social policy, in Mexico it is commonly included and it was considered important for this thesis because of the introduction of tax deductions on private education spending. In housing, several programmes offer subsidies to low income population; the largest one was chosen for the study. On the side of taxes, the thesis includes all social insurance contributions and direct taxes that families should pay at the federal level according to the legislation.

It is also important that the main interest in embarking in this project is to study the reforms of social policies. Fiscal policy is included to estimate the redistributive potential of social policies and because income tax, social security contributions and tax allowances and deductions can play an important welfare role (Howard, 1999, Bradshaw et al., 1993). That is the reason why in the theoretical framework and literature review, the emphasis will be placed on social policy. By incorporating fiscal policy in the data analysis, the thesis will generate a comprehensive picture of the social protection assembly that the last three governments have mounted.

The thesis analyses the reforms implemented between 1994 and 2012. Before 1994 the development of social protection in Mexico system great continuity. Social policy reforms were not adopted even in the 1980s when economic structural adjustment programmes were introduced amidst the debt crisis. It would be until the 1994-2000 government that the transformation of social policy began. The final year of the study is 2012, the last year of the 2006-2012 government and also the last year available for the data analysis.

The thesis seeks to contribute to the literature on social policy in Mexico by identifying its redistributive potential at the vertical and horizontal levels at the household level. It will complement the existing literature on the distribution of taxes and benefits across income deciles,



by investigating the redistributive effects across families of different structure, i.e. number and age of members, and labour market attachment of the earner(s), which determines the eligibility to different kinds of social programmes. The current literature does not identify redistribution across these dimensions. The study will also make a contribution by assessing the entire reform process, from the year before the reforms began until the final year available. No current studies on redistribution in Mexico cover this period. This thesis will provide a better understanding of the potential effects of policy changes on the population, and can serve as a platform from which the effects of future proposals of changes can be estimated

The thesis also seeks to make a contribution at the methodological level, by applying the micro-simulation logic to the study of social policy in Mexico. As commented in the previous section, a micro-simulation model of taxes and benefits was being developed at the same time of this thesis. This thesis represents a first approximation to the redistributive features of the Mexican tax/benefit system.

A third contribution is the identification of the main features of the welfare model that has emerged from the reform process. The literature points out that a residual model has been introduced in Mexico, with the retrenchment of social insurance and the expansion of social assistance programmes. By calculating the potential effects of the tax/benefit system at the household level, this thesis seeks to identify additional features of the social protection model that the policy changes have shaped.

In sum, this thesis constitutes a study of the redistributive potential of fiscal and social policy changes introduced in Mexico between 1994 and 2012. The research will consist in the hypothetical simulation of the effects of taxes and benefits on different family models illustrative of the whole population. The main objective is to estimate how the changes have altered the redistributive potential of the tax/benefit system. The method that will be adopted is the model families approach, described in the next section.

## **1.4. Thesis Overview**

The rest of the thesis is divided in seven chapters. Chapter 2 starts with a review of some of the main conceptual issues around the study of social policy, redistributions and current depictions

of recent reforms. The three main types of social programmes - social assistance, social insurance and universal programmes - are defined and their major redistributive implications are explained. Emphasis is put on the concept of the 'paradox of redistribution', which argues that whilst only social assistance programmes are explicitly redistributive, social insurance and universal programmes can also hold a strong redistributive potential because of the support they can gather. Two theoretical approaches of recent social policy changes relevant for the study of Mexican case are also discussed, retrenchment that has led to the enhancement of the residual component of social policy systems and the productivist turn that social policies have taken to enable the incorporation of people into labour markets.

The second part of chapter 2 begins by describing the evolution of the Mexican social policy system, which is divided in two phases. All the main social policy areas are covered in the narrative. The first phase corresponds to the corporatist or development phase, when social policy was based on social insurance programmes in the context of the hegemonic party regime and the industrialisation through import-substitution (ISI) economic strategy. The second phase corresponds to the reform stage, when social insurance was reformed and social assistance was expanded, in the context of greater democratisation and an open economy. This part also reviews the current literature on the characterisation of the reforms, their main drivers and redistributive effects.

Chapter 3 focuses on the methodological approach and details how the research objectives and questions will be empirically investigated. The chapter begins by listing the research objectives and questions and the expected contributions of the study. The chapter continues by discussing the 'model families' approach and its main advantages and limitations, and the selection of the family types for this study. The final part of the chapter describes the research design, specifies the policy areas and programmes, and offers a comparison of the policy architectures before and after the reforms.

The next three chapters present the results of the data analysis. The effects of taxes and benefits architectures on disposable income are described and compared for the years 1994 and 2012. Chapter 4 shows the effects of taxes on the disposable income of family models. Three types of direct taxes are included. Social insurance contributions are the first type, with two different

contribution structures for private sector and public sector workers. Income taxes are the second type, and are divided in tax schedules for waged and non-waged workers. ‘Popular Health Insurance’ contributions represent the third type, this programme was introduced in 2002 to offer healthcare to families not covered by social insurance.

Chapter 5 presents the effects of cash benefits on disposable income. Three types of cash benefits are included in the study. First, sickness, work injuries and maternity benefits paid by the social insurance system. Secondly, family cash benefits, which are delivered by the *Oportunidades* programme. Third, social insurance and social assistance old-age pensions. This chapter concludes with a comparison of the levels of cash disposable income for different family types before and after the reforms.

Chapter 6 starts by presenting the calculations of the value of benefits in-kind, which are healthcare, childcare and education. The first two are delivered as both social insurance and social assistance programmes; education is the only universal programme in the country. Values are estimated on the basis of per capita spending in each programme, and are added to disposable income in order to obtain the final income after taxes and benefits for each family type. The chapter continues with the calculations of levels of private welfare spending, which were used to estimate income tax deductions. The third section of the chapter reviews changes in housing programmes for families with and without social insurance coverage. The chapter concludes with a summary of the calculations, comparing the potential effects on original income before and after benefits in-kind.

Chapter 7 discusses the research’s main findings. Three points are highlighted. First, that the reforms increased levels of vertical redistribution, but centred on low income population with no social insurance coverage, and towards families with children in higher school grades and with

women in work<sup>1</sup>. The second point refers to the rationale that propelled the reforms. The redistributive features of the reforms revealed a combination of a productivist, or ‘social investment’, logic that prioritises the market as the principal mechanism through which families can overcome poverty, and a residual logic, that targets benefits exclusively on the extreme poor, excluding large sectors of the population who still require support but are not poor enough to qualify for social assistance programmes. The third point that is highlighted is the fragmented nature of the system’s expansion. The reforms have created a fragmented system that reinforces the country’s inequality, but allows the expansion of social protection required in a context of a pluralist democracy. The chapter finalises with a characterisation of the welfare model, referred to as ‘neoliberal’, because the reforms have shaped a social protection system that complements the ‘neoliberal’ economic strategy of low labour costs to enhance the country’s competitiveness.

The last chapter wraps up the thesis. It begins by offering the answer to the four research questions, explaining that whilst the reforms raised levels of redistribution, they mostly benefited families with earners in precarious employment because the expansion was based on productivist/residual social assistance programmes, and characterising the main features of the ‘neoliberal’ welfare model that has been consolidated in the country. The chapter continues by describing the research’s main contributions and policy implications, and finalises with a brief depiction of reforms introduced after 2012 and an exploration of avenues for future research.

## **1.5. Concluding Remarks**

This chapter has laid out the thesis topics, its objectives, questions, scope and rationale. The ultimate goal is to provide elements for the discussion on tax and social policy changes in Mexico and Latin America. Whilst findings do not generate the effects of the final implementation of taxes and benefits, they do reveal the potential redistributive intentions of the

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<sup>1</sup> The Mexican system does not consider any benefits specifically tailored for lone parents. Households headed by lone parents can only receive benefits as long as the parents are in formal employment, in which case they would be covered by social insurance, or if they pass the means-tests that any other household would have to pass to be eligible to social assistance. The system provides benefits to women only as long as they are working, with no difference being made between lone mothers and other women, hence the term ‘women in work’ used throughout the thesis to refer to them.

transformation of the policy architecture, and identify the major shortcomings that explain the failure of social policy to reduce poverty and inequality in recent years.

During recent years, social policy has been expanded in virtually all Latin America, but the study of the Mexican case is especially relevant because contrary to other countries in the region, poverty and inequality have not decreased. It is important to obtain a better understanding of the effects of how social policy changes were designed, in order to offer alternatives for improvement, especially in the face of the rapid socio-demographic changes that Mexican society has been experiencing, and that would require the urgent attention of the state.

## **2. Social Policy, Redistribution and Recent Reforms**

### **2.1. Introduction**

Redistribution is one of the central issues in social policy. States redistribute income by collecting taxes and spending the resources on welfare benefits and services, but different types of social programmes seek distinct types of redistribution. This chapter introduces the main theoretical concepts around social policy, redistribution and the logics that have shaped recent social policy changes around the world.

The chapter is divided in five sections. The next section defines some main concepts around social policy and welfare state models. The third section briefly defines the concept of policy architectures. The following section describes the redistributive aims that social policies may pursue and analyses the redistributive implications of different types of social programmes. The fifth section outlines recent policy changes shaped by the residual and social investment logics adopted across regions.

### **2.2. Social Policy, Social Programmes and Redistribution**

Social policy as a policy field can be defined in several ways. Alcock (2003) defines it as the public policies that contribute or hinder the wellbeing or welfare of individuals or groups. Dean (2012) also refers to the government policies that may bear upon human wellbeing. Beland (2010, p. 19) argues for a broader concept defined by the specific aims that social policies may pursue, hence for this author the term refers to the programmes that ‘...aim to support the poor, fight inequality and promote citizenship solidarity, reduce market dependency... and/or protect workers and their families against specific economic risks’.

Social programmes can be classified in different ways. Two ways are to distinguish between programmes that have publicly or privately provided benefits, and between programmes that deliver cash benefits and programmes that provide in-kind services. An additional classification is based on the programmes’ sources of funding, eligibility criteria and the approaches to setting benefit levels. According to these parameters there are three types of programmes, although a

social programme can combine elements of more than one of these types (Beland, 2010, Gilbert, 2002, Palier, 2010).

- Social assistance programmes, funded by general taxes, consisting of income or means-tested benefits targeted at poor population or specific disadvantaged groups, with flat-rate benefit levels set on the basis of need, with the primordial aim of combating poverty.
- Social insurance programmes, funded by social contributions also known as payroll taxes paid by employers and workers, in many cases complemented by governments with general taxes, cover workers who pay of have paid contributions and usually also their families; entitlement to benefits and benefit levels then depend on the worker's record of earnings and contributions; the main objective is to replace income in the highest degree possible during the periods when workers find themselves out of paid employment and maintain their living standards.
- Universal programmes, funded by general taxes, offering coverage as a social right without income, means or contribution tests, to all or a specific group of citizens or residents; usually benefits are set at the same level of the whole covered population; the principal aim beyond poverty reduction is to achieve high degrees of equality and social cohesion.

Policy areas considered to be part of the social policy field can also vary according to different approaches. Beland (2010) describes five main policy areas shown in table 1 along with some possible objectives; this author does not include education with the argument that although it is a form of social policy and it constitutes an important area of any country's welfare state, it represents a distinct field of study and as a policy area requires other analytical tools. Hill (2003) and Dean (2012), on the other side, do include education because of its fundamental implication for the welfare of the population, along with social security, employment policy, health, personal social services and housing.

**Table 1. Social Policy Areas and Objectives**

Policy Area	Possible Objectives
Work, unemployment and welfare	Income support and services to workers temporarily out of work or with low earnings.
Pensions	Income support for the elderly, disabled or the dependents of a deceased worker.
Healthcare	Access to medical services and/or insurance.
Housing	Help to purchase a home or pay for the rent of one.
Family benefits	Services related to child welfare, gender equality and education.

Source: Adapted from Beland (2010)

As for the concept of welfare state, its definition and use also varies according to different authors. For Beland (2010) the term refers to the group of social programmes in any given country. For Therborn a country could only have a welfare state when social spending surpasses all other spending branches (Castles, 2006) and for the case of Latin America, Filgueira (2002, 2005) argues that the concept cannot be applied to the region because social policies are not as developed in terms of spending and coverage levels as in Western Europe. In this thesis it is Beland's definition the one that is adopted; the terms welfare state and social policy system are used alternatively, along with social protection.

Esping-Andersen, parting from the work of Titmuss, developed a typology of welfare state models highly influential on the social policy literature. The typology consists of three distinct welfare models (Palier, 2010, Dean, 2012, Esping-Andersen, 1990, 1999). This work was based on cross-national research carried out for the mature welfare states of core capitalist countries, but as is explained below, has also been applied to Latin America (Barrientos, 2009, 2004, Dean, 2012). The models and their main features are the following (Palier, 2010, Dean, 2012, Esping-Andersen, 1990, Esping-Andersen, 1999):

- The liberal or residual model, based on social assistance programmes that target the poor, with minimum benefit levels and an emphasis on market arrangements for the allocation of resources, whether through labour markets or the private provision of benefits and



services, and where the emphasis is put on the combat of poverty. This model would be typical of the Anglophone countries of Northern Europe and North America.

- The conservative-corporatist model, also known as ‘bismarckian’ based on social insurance, with earnings-related benefits and fragmented programmes along different occupational lines, where the objective seems to be not so much the reduction of poverty and inequality but the preservation of income status. This model is typical of Continental European welfare state; it is important to note that social insurance in those countries was expanded to achieve universal or quasi universal coverage. This was also the model on which Latin American countries based the original design of their social policies, although with few exceptions, coverage levels remained at much lower levels.
- The social democratic model, based on universal programmes with similar levels of generous benefits offered to the whole population, with extensive state intervention and the main objectives of enhancing equality, social cohesion and homogeneity. Scandinavian countries are seen as the ones that have based their social policies on this model.

Esping-Andersen’s original work was criticised on several grounds, notably on the neglect of the role of the family as welfare provider and on the existence of additional models for different groups of countries (Powell and Barrientos, 2011). Of particular relevance for the study of Latin American social policy is the case presented by several authors for the development of a fourth model in Southern European countries (Ferrera, 1996, 2005, Castles and Ferrera, 1996). Nonetheless, this typology has served as the starting point of welfare state research during the last two decades (Beland, 2010, Dean, 2012). Another important point to note is that welfare models are not found in pure form and in reality a country’s social policy system can mix elements of more than one model, however, research has shown that different groups of countries do tend to share a similar logic and to cluster around one particular models (Palier, 2010, Beland, 2010).

## **2.3. Policy Architectures**

The concept of policy architectures could be useful for the study of social policy outputs and outcomes. Martinez Franzoni and Sanchez Ancochea (2014) roughly define it as the combination of instruments that establish the eligibility criteria, funding, benefits and provision of a social programme. The architecture constitutes the blueprint of the programme, in other words, it shows how the programme was built.

The policy architecture determines the output and outcomes of a programme or a set of programmes. The blueprint creates constraints and opportunities that will define who gets what from social policy. If a programme's architecture lacks the potential to redistribute income in a fair and egalitarian manner, no implementation effort will produce different results.

## **2.4. Social Policy and Redistribution**

Redistribution is at the core of the study of social policy. Welfare states are assumed to be redistributive mechanisms that aim to improve the economic well-being of a group or of the whole population. It is by collecting resources through tax systems and reallocating them through social policies that governments aim to raise the living conditions of some or all citizens. The redistributive effects of welfare states reflect a country's social values and political and power structures. The purpose of this section is to critically discuss the literature on redistribution and the challenges associated with capturing the redistributive effects of social policies empirically (Alcock et al., 2003, Dean, 2012, Stiglitz, 2000).

### **2.4.1. Types of Redistribution**

Although social policy is usually thought of as seeking redistribution from the rich to the poor, this is not always the case. Redistributive objectives and outcomes vary according to the specific features of social programmes and their funding arrangements. The case may even exist when the redistributive effects of a social programme are not progressive but rather end up transferring income from the bottom to the top of the income scale. The type of evaluation that should be carried out to identify a programme's results can also vary depending on the type of redistribution that is sought. Hills (2003) outlines eight redistributive aims that social policies may pursue and their corresponding evaluative approaches.

- Vertical redistribution. The aim is to redistribute income from high to low income levels. The evaluation of the levels of this type of redistribution should focus on the identification of the net gainers and net losers after the payment of the taxes that fund the welfare programmes.
- Horizontal redistribution on the basis of needs. The aim is to redistribute income among people of similar income levels but particular needs, for example, redistribution through public healthcare systems towards people who are in need of medical care.
- Redistribution between different groups. Refers to redistribution between groups defined in a different way than by income level to offset other type of inequalities or to address discriminatory practices, for example, redistribution among different social classes, ethnic, age or gender groups.
- Insurance. Type of redistribution sought by programmes that protect people against economic risks through the pooling of resources. The evaluation is carried out in actuarial terms, that is, the probability of people incurring in the covered risks.
- Efficiency justifications. Programmes that are universal, compulsory and public might be adopted because they are thought to be cheaper than other forms of welfare provision, without special concerns for income redistribution. These programmes could be evaluated in relation to what would be the effect if the services or benefits were to be provided by the market (or other types of welfare programmes).
- Life cycle smoothing. Given that some welfare programmes benefit people during specific cycles of their lives, e.g. elderly pensions, but are funded by generation in another life cycle, e.g. working age people, redistribution does not occur from one person or group to another, but rather across the person's own life cycle, like a savings account in which people deposit whilst they are working and draw out when it is required. The evaluation of this type of effect should be based on the comparison of the total amounts that people put into the system and withdraw throughout their lives.
- Compensating for 'family failure'. Refers to programmes that seek to tackle inequalities within families due to the unequal sharing of resources among their members, for example, when one of the parents in a divorced couple fails to pay child support. Evaluation should be carried out in the same terms, namely estimating the redistributive levels between family members.

- External benefits. Refers to programmes that are justified by their effects beyond the direct beneficiary. An example could be old-age pensions that also benefit other family members, not only the pensioner. Certain evaluations could centre on evaluating these kinds of effects.

#### **2.4.2. Challenges in Assessing Redistribution**

Hills (2003) also comments on seven conceptual issues that should be taken into account when studying redistribution and social policies. The first one is the ‘counter-factual’, that is, what would be the effects on taxation levels, on other welfare programmes or on the overall economy if the studied welfare programme(s) was (were) not there; however he admits that it is quite difficult to assess this empirically. Next issue is the ‘incidence’ of the programme(s), namely, the identification of the real beneficiaries of a programme, since policies may benefit other people besides those who could seem to be the intended beneficiaries. The third issue refers to the ‘valuation’ of benefits and services, which represents less challenges when analysing cash benefits, as they already have a monetary value, but carries certain difficulties when it comes to analysing in-kind services, since the cash value has to be estimated. He comments that the latter is usually done by taking the cost of providing the service for the state, although questions of variations in how much a service cost and how much recipients value it may arise.

A fourth issue described by Hills (2003) is the definition of the groups among which redistribution is going to be studied, because the assumptions that must be made for the selection process will affect the results; an crucial step at this point is the choice of the unit of analysis, e.g. households or individuals, and its features. Another issue is the definition of the concept that will be examined, in other words, the distribution of what will be studied? For example, will it be gross public spending before taxes or net public spending after taxes; at this point the relevance of including the payment of taxes is highlighted to properly identify the redistributive effects of a programme. The last two refer to the time period, since different periods will produce different results; and problems with the availability of the data, since data may not exist for the time period that wants to be studied, at the level of detail required.

An important issue to consider when analysing tax structures are the tax deductions that a system allows for expenditures on private social services. These allowances hide subsidies for private sector provision of welfare benefits and can overly benefit groups of society that tend to purchase those types of services (Howard, 1999).

### **2.4.3. Redistribution and Different Social Programmes**

Redistributive goals vary among the different types of social programmes. Social assistance programmes aim to reduce poverty and inequality by targeting poor or disadvantaged groups by applying income or means-tests. Since funding for the programmes comes from general taxation paid by the whole population, these programmes are thought of as being explicitly redistributive, usually viewed as foremost seeking vertical redistribution, since their logic is that wealthy taxpayers who do not receive benefits fund the benefits and services provided to the poor who may contribute less or not contribute at all because of their condition of poverty (Beland, 2010, Dean, 2012). Nonetheless, horizontal redistribution based on need or aimed at offsetting inequalities generated by other sources than income can occur by targeting specific groups of society, e.g. family allowances for lone mothers.

Social insurance programmes have as their primary aim to maintain income levels throughout people's lives (Palier, 2010), hence are seen as seeking foremost redistribution across the life cycle of the individual. These programmes operate in similar way to a savings account, where by contributing to a fund during their active working years, people can protect themselves against certain risks and receive benefits when required, like in old-age when a pension would be granted or during unemployment spells. However, social insurance is also about risk pooling and depending on their design, these programmes can also contain strong vertical and horizontal redistributive elements (Dean, 2012, Beland, 2010). Examples of vertical redistribution can be found in the design of the structure of contributions. Social insurance contributions may be set progressively so that high income workers contribute a larger share of their wages. Another example can be found in pension systems, where pensions are paid from the resources pooled together by active workers and low income workers may eventually receive more than what they contribute. An example of redistribution on the basis of needs can be the provision of health insurance and health care or cash benefits to people that are ill.

Universal programmes are usually not associated with vertical redistribution, since income is not a variable to establish eligibility or benefit levels and all citizens or residents in a group would tend to receive similar benefit levels. These programmes are usually justified in terms of the promotion of social solidarity, the avoidance of creating disincentives to work or increase income because of the loss of eligibility as in social assistance, or efficiency concerns since even if spending may be higher at the end it could result more expensive to apply income or assets tests like in social assistance programmes. Nonetheless, horizontal redistribution towards specific socio-demographic groups or based on needs does occur, as in the case of universal old-age pensions or healthcare systems (Gilbert, 2002, Beland, 2010), apart from the fact that eventually these programmes can lead to higher levels of redistributions than other types which are explicitly redistributive, as the next section explains.

On the redistributive potential of social assistance programmes, Dean (2012) points out that even if the principal aims of these programmes are to fight poverty and inequality, such outcomes might not be achieved if benefit levels are too low or the tax system is not sufficiently progressive. Hence social policy systems of the liberal type which are based on social assistance might actually have a low redistributive potential and eventually a limited impact on reducing poverty and inequality. Beland (2010) comments on the risk that middle and high income groups show reluctance on paying taxes to fund social programmes that benefit the poor, especially depending on whether the beneficiaries are judged as being ‘deserving’ or ‘undeserving’ poor. This risk might make social assistance programmes politically vulnerable and compromise their funding. Korpi and Palme (1998) carried out seminal research on this topic.

Korpi and Palme (1998) studied the relation between the institutional design of welfare states and their redistributive potential and outcomes. Based on empirical work carried out on mature welfare states, they concluded that, contrary to the objectives explicitly sought, social policy systems based on targeted social assistance programmes with means-tested flat-rate benefits, actually had a lower impact on reducing poverty and inequality levels than other types of systems. The reasons found by the authors for such outcomes were that the overall levels of social spending in each country depended on the institutional design of the social policy system and that an inverse relation existed between the degree of targeting used by welfare states and the levels of social spending. In other words, the more a country used targeted benefits the less that

country spent in total on social policy. The authors finally found that the countries that were basing their welfare state on targeted social assistance programmes and hence presented lower levels of social spending, had a worse record in reducing poverty and inequality. The reason was that redistribution was ultimately left to market arrangements which tend to be highly unequal. This phenomenon was called 'the paradox of redistribution', because the more benefits are targeted at the poor and the more there is a concern with creating equality via public transfers to all, the less likely significant reductions of poverty and inequality will be achieved.

On the other hand, the authors found that welfare states based on social insurance programmes with earnings-related benefits had a better record in reducing poverty and inequality. This was especially true for countries with integrated insurance programmes and less for corporatist welfare states that have different occupational schemes, since in the latter the systems end up highlighting socioeconomic distinctions and generating divergent interests. Earnings-related benefits made the system attractive to middle-class citizens, who would feel compelled to accept higher levels of taxation and contribute to fund it because they would also be benefited, hence increasing the resources available for further redistribution. The opposite was the case of targeted means-tested programmes which incentivised the exit of the middle classes and pushed them to purchase welfare protection in the private sector.

Hence, it is the type of institutional structure of the welfare state, Korpi and Palme (1998) argued, one of the main factors that explain redistributive outcomes. Welfare states with predominant social assistance programmes end up entrenching divisions in society by deepening the cleavages between the poor who the system targets, and other social classes who largely pay for the taxes and contributions to fund it. This in turn hinders the formation of cross-class redistributive coalitions to demand an expansion of the welfare state with services and benefits of better quality and higher amounts. On the contrary, welfare states with universalistic features that cover all citizens in the same programmes foster coalition formation, creating a broad support base for social policies and resulting in an increase in the resources available for redistribution. The authors do acknowledge that other factors such as political traditions, demographic composition and industrial structures also have an impact on redistributive outcomes, but they suggest that institutional design is the or one of the principal ones.

## **2.5. Recent Changes: The Residual and Social Investment Logics**

Social policy systems have been extensively reformed in a global scale during the last 30 years. A retrenchment wave was triggered in the United Kingdom and the United States, but also in Chile, after the long period of expansion of state intervention in the social sphere that started at the end of the Second World War. A combination of economic changes, right-wing governments and rising expenditure due to the maturing of welfare states provoked calls for the retrenchment of welfare states. The welfare state was blamed for being wasteful, too bureaucratic and encouraging welfare dependency. The neoliberal paradigm emerged in social policy, prioritising fiscal austerity, and promoting cuts to social programmes, the introduction and expansion of residual policies that targeted benefits exclusively at the poor (Pierson, 1996, Beland, 2010).

For countries in the capitalist core, Pierson (1996) argued that the legacies of social programmes and the constituencies created by them, diminished the influence of neoliberalism; so that in spite of the pressures for retrenchment, different countries followed the social policy model they already had established. So countries with a corporatist welfare state continued along the same path, as countries with universal types did. Yet, authors like Hacker (2004) and Thelen (2003) showed how even if structural changes were not evident and countries have followed their unique paths, the analysis of different modes of policy change revealed significant shift towards a more residual type of social policy across policy areas and countries.

Gilbert (2002) elaborated on the transformation of social policy and described it as the shift from the welfare state to the enabling state. For this author the rise of the enabling state represented a new paradigm based on policies that target benefits, promote work, emphasise individual responsibility and subsidise private arrangements. The primary aim of social policy was no longer to protect people from market failures, but to enable the functioning of those markets. The market was now perceived as the principal mechanism for welfare provision. The risk was that public policy would be mostly focused on increasing productivity, hence adopting a productivist character, with no purpose of public service and a diminishing support for the original goals of social policy, namely fighting poverty and inequality, enhancing social solidarity and protecting families from market risks.



Giddens (1998) introduced the concept of positive welfare and social investment strategies as a third way between the traditional social policy paradigm and neoliberalism. Under this perspective, social policy should not only be about protecting people from economic risks, but more about providing the necessary resources for people to face those risks, whilst more emphasis should be put on obligations, not only rights. Positive welfare meant investing in human capital so that people acquire the necessary resources to face risks, rather than providing income support or maintenance. Enhancement of human capital should be pursued by adopting social investment strategies; for example, instead of sweeping labour market deregulation as neoliberals would propose, or an exclusive reliance on unemployment insurance programmes as in the traditional social policy paradigm, Giddens argues the state action should focus on active labour market policies (e.g. training and education) that provide people with the necessary skills to participate in labour markets.

Morel et al (2012) explain that the social investment approach is based on policies that invest in human capital, like childhood education and care and lifelong education, make efficient use of human capital, like women's employment, and enhance social inclusion, like enabling the access to labour market for groups traditionally excluded. For these authors social policy should be seen as a productive factor for economic development and growth, in contrast to neoliberalism that views it as a cost and hindrance. The ultimate goal of social policy should be to prepare people for current economic (e.g. flexible labour markets) and socio-demographic transformations (e.g. new social risks like population ageing and the increase in lone parenthood).

Morel et al (2012) argue that their concept of social investment, based on previous work by other authors that advocate a social-democratic perspective, differs from Giddens's because the latter is too close to the neoliberal paradigm. They note that Giddens's criticises generous benefits for increasing 'moral hazard', that he places too much weight on duties and not enough on rights, that he perceives that inequality is necessary for economic efficiency, and that he places too much emphasis on social policy as a 'spring board' for change neglecting its protective role. The authors claim that social policy should be centred on both an investment and a protective strategy.

Morel et al (2012) and other authors (Nolan, 2013) warn about some risks of adopting the social investment strategy. One of these risks is the sacrifice of the fight against poverty in the present with the expectation that investment in human capital will reduce it in the future. As social spending is channelled through policies that aim to prepare people to face future risks, like education and training policies, less attention can be paid to policies that should be addressing current social problems. Another risk is that social policy focuses on the incorporation of women to labour markets for economic purposes, with no real interest on policies that aim to improve their living standards.

## **2.6. Concluding Remarks**

This chapter presented the principal theoretical concepts that serve as a framework for the thesis. The review was based on literature that explained the characteristics of the different types of social programmes, their redistributive implications and the challenges in measuring redistribution. The differences between the redistributive implications of social insurance and social assistance programmes are fundamental for the study of the Mexican case.

The chapter concluded with a discussion of theories around recent social policy changes. Two logics have shaped the transformation of social policy since the 1980s. On one hand, the curtailing of social programmes and the emphasis on residual targeted policies to reduce spending levels; on the other, the introduction of policies that aim to incorporate people into the labour markets by investing in their human capital. The authors cited here have developed their insights by analysing the transformation of social policy in countries with advanced welfare states. However, it was in Latin America where the residual and social investment logics were pioneered, by innovations like the privatisation of pension systems and the introduction of conditional cash transfers. The concepts discussed in this chapter are highly relevant for the study of Mexican social policy, as the next chapter will show.

### **3. Social Policy in Latin America and Mexico**

#### **3.1. Introduction**

The Mexican social protection system has been deeply reformed during the last decades. The thesis aims to reveal the redistributive effects of those profound changes. This provides the historical, social and labour market contexts of the research, and maps the social protection policy architectures before and after the reforms.

The chapter begins with a summary of the history of social policy in Latin America. The next section provides the narrative of the evolution of the Mexican social protection; it offers some basic information about the Mexican political and economic contexts and then focuses on a detailed description of the evolution of the Mexican social protection system with an emphasis on the reform process. The following section discusses the recent literature on social policy reforms in Latin America and Mexico, with special attention on studies of redistribution conducted in the latter. The fourth section presents basic socio-demographic and labour market indicators. The fifth section maps the country's social policy architecture. Finally, some concluding remarks are provided.

#### **3.2. Social Policy in Latin America**

The history of social policy in Latin America can be divided in two phases. The first phase is associated with the implementation of the import substitution industrialisation (ISI) economic model and the populist authoritarian or semi-authoritarian political regimes that prevailed in the region between the 1930s up to the 1970s. Most Latin American countries implemented a social protection system during the first half of the 20th century. These systems were a fundamental part of the industrialisation through import substitution (ISI) strategy and the populist semi-authoritarian political regimes that appeared throughout the region during the first half of the twentieth century. Although social protection systems varied significantly, at the core of virtually all of them were social security systems based on social insurance principles that provided healthcare and protection against social risks for insured workers and their families. These

systems were similar to European social insurance systems, with the notable exception that they remained with much lower coverage levels.

The second phase is associated with processes of political and economic liberalisation that began in the 1980s. This second phase can in turn be divided in two stages; the first one when pressures for retrenchment spread throughout the region and led to measures like the privatisation of pension programmes; and a second stage characterised by the expansion of social protection coverage to groups of the population traditionally neglected, with programmes like conditional cash transfers.

### **3.2.1. The Development Phase**

The first phase of the history of social policy in Latin America covers the period between the 1940s and the 1980s. The initial development and expansion of welfare systems is associated with the implementation of the ISI economic model adopted and the emergence of populist-corporatist political regimes after the Second World War. Even though some countries like Argentina and Uruguay had introduced comprehensive social security systems decades before in the 1910s, it was not until the 1940s that social policies expanded throughout the region (Barba, 2006, Filgueira, 2005, Huber, 1996, Barba, 2004). Under the ISI model, the state assumed the central role in the development effort and sought the promotion of domestic industries and markets by a series of protectionist measures, like the imposition of tariffs and conditions on the import of manufactured and capital goods, and the regulation of foreign investment; whilst providing direct subsidies for the creation and strengthening of native industries, and capital for basic economic and social infrastructure (Filgueira, 2005, Moreno-Brid et al., 2009).

Social policy then became an essential component of the industrialisation strategy and the corporatist organisation of society pursued by the states. Huber (1996) comments that the adoption of the ISI model favoured the growth of salaried urban middle and working classes, which required protection from loss of income due to old age, illnesses and injuries. Since these groups of workers were organised in trade unions, they were able to demand social benefits from the state. The state responded to their demands because they constituted the strategic groups for the functioning of the ISI model. The state's response was based on the provision of social protection in the form of 'bismarckian' social insurance programmes, which were not opposed

by employers as a protected economy gave them the opportunity to pass their share of the cost on to the final consumer (Brachet-Marquez, 2007, Dion, 2005). Hence, governments offered social protection coverage to the strategic social groups and in return the groups provided the political support necessary for the legitimacy of the political regimes (Dion, 2010).

Eventually, social insurance systems would emerge in most of the countries of the region. The systems usually included health, old age and work injuries insurance. Unemployment insurance remained underdeveloped, but employment protection was offered through legislation that enforced severance payments upon unfair dismissals. Social insurance became a complement to the industrialisation strategy; in fact, as Barba (2004) puts it, social insurance was one of the axis of the coalition formed by the middle classes, trade unions, business organisations, politicians and civil servants that supported the ISI model.

Latin American social protection systems would evolve with a high degree of stratification. Differentiated access to benefits and services according to the employment status of the insured worker (families were covered only as economic dependants of the insured worker) reflected the power balances in each country. Commonly public sector and key industry workers were both the first to be protected and enjoyed higher protection levels than the rest of the covered workers (Filgueira, 2005, Barrientos, 2004, Barrientos, 2009, Barba, 2004, Barba, 2006, Lautier, 2001). Moreover, since access to the systems was made dependable on employment status, large sectors of the workforce (e.g. the self-employed, rural workers and peasants, workers in small enterprises who operated in the informal economy and were not organised and domestic workers) were excluded, resulting in what has been defined as a ‘truncated’ social policy, because coverage never extended beyond what came to be known as formal sector workers (Barrientos, 2009, Moreno-Brid et al., 2009). In fact, this exclusion ended up dividing the populations and generating definitions for the concepts of formality and informality (Frenk et al., 1999).

The processes roughly summarised here varied greatly across the region. The literature shows more than significant differences in the political environment, levels of industrialisation, or economic growth, just to mention some factors that influenced welfare state emergence and development. Several authors have compared this processes in the region, e.g. Huber (1996),

Filgueira (2005, 1998) and Segura-Ubiergo (2007). The objective here is not to present an extensive review of this period; but just to mention some examples of the differences, countries like Argentina and Uruguay implemented comprehensive social security programmes decades before the rest of the countries and even before some core capitalist countries like the United States. These countries also registered higher coverage levels, close to some European systems; Costa Rica implemented a system more along ‘Beveridgean’ principles with universal health coverage; Brazil and Mexico were perhaps the two countries where the segmentation of the system was the strongest; whilst in most Central American countries the development of social policy occurred at a later stage, with very limited coverage and excluding the majority of the population (Mesa-Lago, 2000, Mesa-Lago, 2009, Filgueira, 2005, Barba, 2004, Barba, 2006, Segura-Ubiergo, 2007). Despite the differences, the existence of a large informal sector and highly stratified welfare systems, were features present all Latin American countries throughout the expansion phase (Huber, 1996).

### **3.2.2. The Reform Phase**

The second phase of social policy development in Latin America starts in the 1980s. Neoliberal economic reforms were introduced in that decade as a consequence of the severe economic crises affected the region. The crises were originated by the excessive debt acquired during previous decades, and particularly in Mexico where the cycle of crises began in 1982, due to the fall in oil prices. Closed economies, excessive public spending and high levels of corruption were perceived as the crisis main causes. In response to these problems and following advice of international financial organisations, countries in the region introduced programmes of economic liberalisation. In some cases the economic liberalisation measures were a condition to obtain rescue packages that the IFIs offered. The package of economic structural adjustment measures came to be known as the ‘Washington Consensus’ (Haggard and Kaufman, 2008, Huber, 1996).

The ISI strategy was dismissed and replaced with an export-oriented growth model. At the same time, processes of political liberalisation began to unfold and pluralist democracies gradually consolidated. Social policies were reformed in tune with these economic and political changes. Reform models differed across the region, but an initial common denominator was the pursuit of the enhancement of the role of markets in welfare provision, in conjunction with an expansion of

social protection beyond the groups traditionally covered (Haggard and Kaufman, 2008, Barrientos, 2009, Dion, 2010).

Economic restructuring propelled the first stage of the reforms in the social policy realm. Protectionist policies were perceived as part of the problem that detonated the crises and governments shifted towards export-oriented economies. International financial institutions (e.g. the International Monetary Fund, the World Bank and the Inter-American Development Bank) played a major role in the promotion and implementation of the reforms, even though the role of local elites who benefited from the reforms was also important. Structural economic reforms included reduction or elimination of trade tariffs, budget cuts and the contraction of the public sector, privatisations of public enterprises, financial sector deregulation and opening to foreign investment (Barrientos, 2004, Barba, 2006, Huber, 1996).

In the social policy field, the reforms sought the retrenchment of social insurance programmes and enhancement of the role of markets in welfare provision. Austerity measures and economic liberalisation policies generated increases in the size of informal employment and in unemployment and poverty rates. Social insurances systems came under financial pressures due to the reduction in the number of contributors and wage levels. In addition (and perhaps more importantly), the neoliberal agenda pushed by IFIs and domestic elites promoted the idea that social insurance programmes were to blame for high labour costs, for creating economic inefficiencies, for being an obstacle to the expansion of the formal sector and for privileging certain types of workers and not targeting the neediest population groups, among other criticisms, some of which were also applied to employment protection legislation (Barrientos, 2004, Huber, 1996, Lautier, 2001, Barba, 2005). Social policy reforms spread throughout the region a few years later after economic reforms were implemented. The common policy changes implemented in the region during this stage were the privatisation (or semi-privatisation) of pension systems, changing from an pay-as-you-go system of defined contributions to an individual capitalisation system of defined benefits; the decentralisation of health and education services; and the flexibilisation (either *defacto* or *dejure*) of labour legislation (Mesa-Lago, 2000, Mesa-Lago, 2009, Barrientos, 2004).

In some countries the second stage of the reforms developed simultaneously to the first stage, in others a few years later. The second stage is associated to the processes of political liberalisation and democratisation that also emerged during the 1980s. This stage is characterised by the expansion of social protection to groups of the population traditionally neglected. The causes that explain the expansion wave are the growth in the size informal economy, the increase in poverty rates, pressures generated for greater democratisation and the consolidation of multi-party electoral competition. These factors combined to prompt governments to introduce policies to benefit the majority of the population conformed of poor informal sector workers and their families. This sector of the population would have been ignored under the previous political regimes, because their legitimacy resided in the corporatist structures, and not in the electoral system. Targeted social assistance programmes, notably conditional cash transfer (CCT) programmes but also others like non-contributory pensions became the ideal medium to deliver social benefits to groups of the population never reached before by social protection (Dion, 2010, Lavinas, 2013).

The scope, depth and outcomes of the reforms varied greatly across the region, yet these trends of retrenchment of social insurance and expansion of social assistance can be observed in most countries. It has been argued that social policy in most South American countries has entered a third post-neoliberal phase, characterised by the overhaul of some of the market-centred reforms of the 1980s-1990s (Cameron and Hershberg, 2010, Huber and Stephens, 2012). However, as will be shown in the following section, this does not seem to be the case of Mexico.

### **3.3. The Case of Mexico**

Mexican social policy followed a similar trajectory as the rest of the large Latin American countries. The main welfare institutions were created during the 1940s and 1950s, expanded throughout the next three decades, but then were reformed after the economic crises of the 1980s and 1990s. This section reviews the history of social protection in Mexico, summarises major reforms and highlights the main policy changes.

The section begins with a brief history of the Mexican political regime, to serve as context for the evolution of social protection. In 1910 a social revolt broke out to overthrow the dictatorship



of Porfirio Diaz. The dictatorship fell in 1911, elections were held and the leader of the revolutionaries, Francisco Madero, was elected president. A coup overthrew Madero in 1913, who was assassinated, but a group of former revolutionaries with leaders like Francisco Villa and Emiliano Zapata fought back, defeating the spurious regime. Eventually violent conflict began among the revolutionary factions, mainly between the more agrarian factions of Villa and Zapata and the more urban factions of Venustiano Carranza and Alvaro Obregon. These series of violent conflicts came to be known as the Mexican Revolution (Silva-Herzog, 1997).

When the country was relatively pacified, two outcomes that would shape the country's future emerged: i) a new constitution enacted in 1917 that incorporated social and labour rights and was considered at that time a highly progressive piece of legislation; and ii) a hegemonic political party that dominated the Mexican political system for most of the 20th century. This party was originally created in 1927 to group all the revolutionary factions with the name National Revolutionary Party; the party's name was changed to Mexican Revolution Party and organised under a corporatist structure with representation of workers, peasants and public workers organisations in the 1930s; in the next decade the name was changed again to Institutional Revolutionary Party (PRI) and has remained with that name until these days (Crespo, 1994).

The PRI dominated political life in Mexico for seven decades. The Mexican political regime was defined by Sartori (1976) as a hegemonic party system, different from one-party totalitarian regimes (e.g. USSR) or dominant party regimes (e.g. India). Mexico is a federal country, so elections were systematically organised for executive and legislative positions at the three tiers of government, namely municipal, state and federal, but there was not real political competition given the PRI's virtual absolute control over all political and economic resources. The PRI functioned as a negotiating space and as the political arm of the president in turn. A few opposition parties participated in elections, but they were mainly allied with the PRI. Perhaps the only real legal opposition came from the right wing National Action Party (PAN), but it never could present any real competition to the PRI. The communist party was illegal until the late 1970s.

Political pressures for democratisation began to rise since the 1960s and resulted in the important electoral reform of 1977, however, the process of political liberalisation did not gain momentum

until the 1980s. Amidst a severe economic crisis, pressures from the right and the left gradually began to open up the political system. In spite of some repression, especially towards leftist movements, after the Zapatista movement and after another economic crisis hit the country in the mid-1990, the definitive political reform that left the organisation of elections in the hands of a citizen council was implemented in 1996. Finally, in 1997 the PRI lost control of the Chamber of Deputies and in 2000 the PAN candidate won the presidential elections. In 2006 the PAN repeated their victory in the presidential elections (Crespo, 1994, Brachet-Marquez, 2007).

### **3.3.1. The Evolution of the Mexican Social Protection System**

As mentioned before, the history of the Mexican welfare system is usually divided in two phases (Barba, 2006, Barba, 2004, Barba et al., 2007, De Gortari and Ziccardi, 1996, Cordera and Lomeli, 2005, Brachet-Marquez, 2007, Brachet-Marquez and De Oliveira, 2002). Although the precedents of social protection in the country go back to the Mexican revolution and the enactment of the 1917 constitution, the beginning of the development phase tends to be situated during the 1940s, when first national social insurance programmes were created, During this phase social insurance programmes acted as both complementary and corrective mechanism to the industrialisation and urbanisation strategy implemented by the state, and were crucial to gain the necessary support that the political regime required to gain legitimacy. From the 1980s up to date, structural reforms adopted to deal with severe economic crises prompted the introduction of a neoliberal paradigm and the adoption of market-centred reforms in the social sphere, whilst democratic pressures prompted the extension of social protection coverage.

#### **3.3.1.1. Development Phase of Social Protection in Mexico**

##### **3.3.1.1.1. Early Days**

The first precedents of social legislation in Mexico were work-injuries regulations passed by the governments of the two industrialised states of Nuevo Leon and Mexico during the first decade of the 20th century<sup>2</sup>. During the Revolution, several leaders embraced worker's demands for

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<sup>2</sup> According to Brachet-Marquez (2007), a response to the anarchist inspired labour movement which preceded the Mexican Revolution. The movement was repressed but it put pressures on the government to increase the level of protection for workers. The strikes at the Cananea mine and Rio Blanco textile plant are two examples of actions promoted by the movement. For a full account see Cockroft (1971).

social protection (e.g. President Madero created the Department of Labour in 1912 with the objective of mediating labour conflicts and installing a social security system; a minimum wage law was passed in the same period) but political instability made it unfeasible for any programme to be implemented; nonetheless, as the different fighting factions began competing for labour's support and as some revolutionary leaders began implementing some social reforms at local levels, expectations for social change started to rise (IMSS, 1996, Brachet-Marquez, 2007, Solis Soberon and Villagomez, 1999).

In 1917 a new constitution was drafted, which along with labour rights, land reform and the right to education, incorporated the right to social security. Article 123 established an obligation for federal and local governments to create insurance funds for disablement, life, involuntary unemployment, accidents and others with similar ends (IMSS, 1996, Solis Soberon and Villagomez, 1999a). It took decades for some social reforms to be carried out, but the constitution provided a blueprint for future social demands and state responses, and was fundamental for the stabilisation and legitimisation of the regime that emerged out of the Revolution (Cordera and Lomeli, 2005, Brachet-Marquez, 2007).

The constitution mandated the introduction of social security for workers, but no programme was introduced for more than 20 years, except for the case of public civil servants. In 1925 the General Law for Civil and Retirement Pensions was passed and the Department for Civil and Retirement Pensions was created to regulate and administer this scheme, it included pensions and housing loans. Following a series of strikes teachers were also incorporated in 1928. A special insurance system for the military was also created (Solis Soberon and Villagomez 1999b; ISSSTE 2011a).

Attempts to introduce a national social insurance programme during the 1920s and early 1930s failed. The winning faction of the Revolution, in its fight against other factions, sought, and effectively attracted the support of organised labour, but no plan on social insurance was implemented due to opposition from the employer sector, to the fact that the government began to favour the country's capitalist development and to the economic depression (Solis Soberon and Villagomez, 1999, Brachet-Marquez, 2007, IMSS, 1996).

Another important development during the period was the enactment, in 1931, of the Federal Labour Law (LFT for its acronym in Spanish). Nonetheless, on social security, this piece of legislation only included the topics of work accidents and illnesses and severance payments for unjustified dismissals (IMSS, 1996).

The administration of President Cardenas (1934-1940) stands out for its progressive reforms (e.g. nationalisation of strategic industries, land redistribution), but on the social policy front no national social protection system was introduced. Besides a network of health centres for rural population and the improvement of public servants and military pension schemes and the introduction of similar schemes for oil and railroad workers, plans for the implementation of a national insurance programme were halted basically due to tensions between the government and business generated by the large scale of the several of the reforms (IMSS, 1996, Brachet-Marquez, 2007, Dion, 2005).

#### **3.3.1.1.2. The Post-War Period**

After the Cardenas presidency, the regime would make a turn towards the prioritisation of industrialisation and capitalist development. This allowed for the incorporation into the regime of the private business class represented by several employer organisations, who would grow in power, effectively becoming the fourth unofficial sector, and perhaps the most powerful, of the regime's corporatist structure (Gonzalez Casanova, 1965).

The ISI model was adopted by Mexico in the early 1940s, and social policy would become an important element of the model, as its complementary or corrective mechanism (Barba, 2006, Barba, 2004). The cornerstone of social protection in the country is the enactment of the Social Insurance Law (LSS) and the creation of the Mexican Institute for Social Insurance (IMSS for its acronym in Spanish) in 1943. After much hesitation during the previous administration, the government's final decision to implement social insurance was the product of pressures from labour organisations and the need for the regime to guarantee their support, especially after the contested elections of 1940 (Dion, 2005). It can be claimed that social insurance sealed the corporatist pact between the state and organised industrial workers.

The IMSS was structured around a ‘Bismarckian’ social insurance model<sup>3</sup>, conducted by the state with tripartite participation in its administration incorporating workers and employers representatives. Contributions were also tripartite. Insurance became compulsory for all employees and benefits were extended to their families. The self-employed, domestic workers, peasants and workers in the rural sector and independent professionals were left out (IMSS, 1996).

The LSS considered protection for sickness, maternity, work injuries, disablement and old-age, plus the death of the insured worker; namely all contingencies commonly covered by systems around the world except unemployment, with the argument that it was already covered by the severance payments that employers had to pay for unjustified dismissals, according to the Federal Labour Law enacted in 1931 (Brachet-Marquez 2007).

Little was offered for the population sectors excluded from social insurance apart from basic health services and public health campaigns operated by the Secretariat for Health also created in 1943. Basic health services commonly required the payment of fees at the point of service and were very limited; they intended to substitute the rural health centres network that had been president Cardenas had try to create. At the end, the creation of the Secretariat for Health represented a duplication of normative and budgetary functions with the IMSS and the creation of dual health system that promoted inequality: on one side the IMSS services, on the other the ministry’s services, underfinanced and with far lower benefit levels (Frenk et al., 1999, Brachet-Marquez, 2007, Bosch and Campos-Vazquez, 2010, Lakin, 2010).

The IMSS expanded slowly throughout the country in the next two decades, concentrating in large urban areas (IMSS 1996). Social spending was kept at low levels compared to countries like Argentina and Chile. The state leaned heavily towards a strategy of industrialisation and capitalist development. Public spending was largely devoted to the promotion of a domestic industry. However, there were other policies not part of the social security system that fulfilled a

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<sup>3</sup> This was the model promoted by the International Labour Organisation and adopted in several Latin American countries during the same decade (Frenk et al. 1999, Mesa-Lago 2000), as well as in some southern European countries (Barrientos 2009).

social role. Land redistribution, although significantly slowed down after the Cardenas period, was still particularly important for the rural sector and for the regime as an instrument of social control. Food subsidies programmes were also important, along with the rapid expansion of basic education (Hansen, 1971, Barba, 2006, Barba, 2004).

In 1960 the Institute of Social Security and Services for State Workers (ISSSTE for its acronym in Spanish) was created. The ISSSTE substituted the Department of Retirement and Civil Pensions but with an increase in all benefit levels. Its creation represented a further fragmentation of the welfare system, because the IMSS could have assumed this functions (ISSSTE, 2011). Although the IMSS could have been assigned the responsibility of social security for public servants, pressures from public sector unions first to surpass the benefit levels prompted the creation of a separate legislation for them. Insurance systems for oil, railroad and electricity workers were also enhanced during those years and a special scheme was created for banking sector employees (IMSS, 1996, Frenk et al., 1999). Social insurance institutions would become the main articulation mechanism between the ISI model and the corporatist arrangements between the state and its urban allies of the industrialising coalition (Barba, 2004, Barba, 2006).

By the 1960s the ISI model in Mexico had generated very high economic growth rates but an extremely unequal development. Pressures for social change began to rise. Railroad and health workers' strikes and the student movement of 1968 were all signs of that social unrest. Hence, with its political legitimacy at risk, the regime attempted a course change, though never abandoning its authoritarian and corporatist natures (Hansen, 1971, Brachet-Marquez, 2007, Barba, 2006, Barba, 2004)

An important element of the course change was a pretended expansion of the social protection system. However, attempts at a fiscal reform that would have been necessary to fund that expansion failed due to the opposition of what had become a very powerful business sector (Hansen, 1971, Brachet-Marquez, 2007).

#### 3.3.1.1.3. The Expansion Attempt

The social insurance law was reformed in 1973 with the main intention of expanding the benefits of social security to uncovered groups. Compulsory insurance for a minority of the rural workforce was instrumented, but for most sectors rural sector workers and peasants, domestic and independent workers, the self-employed and employers, only voluntary schemes were introduced. The reform specified that through presidential decrees, they would be gradually incorporated into the compulsory insurance scheme (IMSS, 1973b, IMSS, 1973a). However, that has never happened. The reform also introduced the option for any individual not subject of compulsory or voluntary insurance, to access the IMSS medical services (IMSS, 1973a, IMSS, 1973b).

Benefit levels were also increased as part of the LSS reform (e.g., new family allowances for pensioners), but perhaps more importantly, a new insurance branch to fund day care centres for children of women in work, between the ages of 43 days, when maternity leave ended, and 4 years, when preschool education began. The obligation of IMSS to provide child day care was already established in the LSS since the 1960s, but it had not been implemented. An insurance prime was introduced of one percent of salary entirely paid by employers for all workers, both male and female and regardless of whether they had small children (IMSS, 1973a, IMSS, 1973b). The IMSS was already providing child care services for children of its own female employees (Brachet-Marquez, 2007) and the ISSSTE offered these services for female civil servants.

The growth of the IMSS day care centre network was slow. Between 1974 and 1983 only 78 new centres were built, offering just above 17,000 places for children. One reason was that resources from the corresponding insurance branch were utilised to fund the sickness and maternity branch which financed medical services (IMSS, 1996).

In 1972 the INFONAVIT (National Institute for the Workers Housing Fund) was created to fund housing for insured workers. Before INFONAVIT's creation, public intervention in the housing sector had been restricted to the building of housing units for public sector workers. People who migrated from the countryside to urban areas commonly occupied irregular settlements, which tended to be gradually upgraded through PRI's clientelistic arrangements. Rural migrants were

de facto becoming owners of their own dwellings; which limited pressures for wage increases, thus providing cheap labour for the industrialisation process. When large scale public housing policy began, it concentrated on the same formal sector groups that had been benefited by social insurance. At the start, INFONAVIT both built and offered credits for new homes to workers in the formal sector already insured by the IMSS, with a tripartite administration that considered participation of employers, workers and government representatives. A payroll tax of five percent of salary, entirely paid by employers, was introduced to finance the fund (Brachet-Marquez, 2007). Employers did not oppose the new contributions, since in a closed economy they could pass the cost on to the final consumer (Brachet-Marquez, 2007). A similar housing fund called FOVISSSTE had been created for civil servants and administered by ISSSTE (ISSSTE, 2011).

INFONAVIT would later be transformed into a solely financing institution, leaving the construction of housing projects to private construction companies, which were many times owned by union leaders. One of the arrangements within the PRI was that, in exchange for the opportunity of profiting from the housing scheme, these leaders kept their union members under control (Brachet-Marquez, 2007).

Another important element of the pretended expansion of the welfare system during the 1970s were poverty combat programmes mostly in rural areas emphasis was placed on the rural sector, like Public Investment Programme for Rural Development (PIDER) in the 1970-1976 administration; and the National Plan for Depressed Zones and Marginalised Groups (COPLAMAR) and the Mexican Food System (SAM) in the 1976-1982 administration. They included food subsidies and distribution; construction of water, electricity and road infrastructure; and health services, administered jointly with IMSS. These programmes would be characterised for being temporary and for their lack of coordination, inefficiency and extended clientelistic use. They would all be scaled down as part of the budget cuts introduced after the debt crisis of 1982 (Brachet-Marquez, 2007, Barba, 2006, Cordera and Lomeli, 2005, Palacios Escobar, 2007).



### 3.3.1.2. The Reform Phase

The economic crisis of 1982 led to the demise of the ISI model and the introduction of neoliberalism in the country<sup>4</sup>. The government responded to the crisis with the implementation of structural macroeconomic reforms, policies of trade and financial liberalisation, market deregulation, privatisation and the reduction of the state's intervention in the economy (Moreno-Brid et al., 2009); yet, apart from the cancellation or fusion of anti-poverty programmes, an attempted decentralisation of education and basic health services and the introduction of income tax deductions for private health expenditures, no large scale social policy reform was implemented for more than a decade (Brachet-Marquez, 2007, Laurell, 2001).

Two important events did happen on the social policy front during this early period of neoliberal economic reforms. On one side, after the contested elections of 1988, when a faction of the PRI split in protest of the economic reforms and joined old left-wing movements to postulate a presidential candidate and eventually form a new political party, which would be called the Democratic Revolution Party (PRD), the federal administration created the National Solidarity Programme (Pronasol) which became the first attempt at providing social benefits in a large scale outside the social insurance system. The government opted for this design to evade the traditional corporatist structure, since several union leaders had supported the left wing candidate. Nonetheless, the Pronasol did not represent any increase in the levels of social protection because it was basically an umbrella programme that grouped several initiatives like the provision of water and infrastructure in poor neighbourhoods and because of its high clientelistic nature. On the other side, the de facto deregulation of labour markets, as trade liberalisation, which included the North American Free Trade Agreement (NAFTA), required cheap labour costs to compete in an open economic environment (Brachet-Marquez and De Oliveira, 2002, Dion, 2009, Dion, 2008).

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<sup>4</sup> International financial institutions (IFIs) like the World Bank (WB) and the International Monetary Fund (IMF), played an important role in promoting and prescribing neoliberal reforms in Mexico, providing technical assistance and conditioning loans and financial support upon the implementation those reforms (Mesa-Lago and Muller, 2002, Barba, 2006), nonetheless, as Barba (2006) notes, the reforms should not be conceived as external impositions by the IFIs because they were accepted, modified and implemented by a local technocratic elite.

After a new economic crisis affected the country in 1995, the first large scale social policy reform was undertaken. The 1997 pension reform replaced the pay-as-you-go system of defined benefits for an individual account system of defined contributions. Private financial firms called Retirement Fund Administrators (AFOREs) were created to manage the pension funds. Whilst the IMSS was left in charge of collecting contributions, the payment of pensions was left to private insurance companies. The period of contributions required to be eligible for an old-age pension was raised from 10 to 25 years (Solis Soberon and Villagomez, 1999, IMSS, 1997). The reform was largely conceived as a way of strengthening the domestic financial sector after the crisis, in the face of the financial crisis of late 1994, by creating a solid instrument to boost national savings and reduce the dependency on foreign capital and the risks and costs of financial volatility (Barba, 2006, Barba, 2004, Brachet-Marquez, 2007). Other changes to social insurance included the decrease in employer contributions and increase in the state's share, and the subcontracting of childcare services to for-profit private providers<sup>5</sup> (IMSS, 1996, Knaul and Parker, 1997).

Another important social policy reform also undertaken in 1997 was the creation of the Programme for Education, Health and Nutrition (*Progresa*), which consisted of cash transfers for low income families conditioned on school attendance of children and regular health check-ups and attendance to health talks. *Progresa* was a response of the government to the dramatic increase in poverty levels after the economic crisis, designed under a logic that viewed labour market participation as the main instrument mechanism to overcome poverty. Strict targeting was one of its main features (Levy, 2006, Levy and Rodriguez, 2004). It represents the first programme that paid cash benefits to poor families in the country's history, and substituted other poverty reduction initiatives like the *Pronasol* and generalised food subsidies, which were criticised for not being aligned with a market rationale (Barba, 2006, Barba, 2004). At the end, as mentioned, *Pronasol* was highly clientelistic, but besides these arguments there was also a strong political motive for dismissing it, since it had become tightly identified with the administration of president Salinas and a quarrel had started between him and the current administration of president Zedillo (Cordera and Lomeli, 2005).

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<sup>5</sup> The participation of non-profit social organisations to provide care services for children of IMSS female members had been introduced since 1983, but this new policy allowed for private providers who sought profit to become subcontractors paid a fee to the provider for every child registered in the day care.

After the PAN won the presidential elections in 2000, the name of Progresa was changed to Oportunidades, and the programme was expanded to urban areas and benefits were enhanced. In a few years the programme was offering benefits to more than 20 million people throughout the country. During the two PAN administrations between 2000 and 2012 targeted social assistance would be greatly expanded. Other programmes were implemented besides Oportunidades, all of which targeted low income population not covered by social insurance. Other policies included childcare services for low income women in work, non-contributory old-age pensions for elderly people in localities of less than 30,000 inhabitants and the voluntary health insurance programme funded by contributions from the state and families, called Popular Health Insurance, (PHI) (Dion, 2008, Levy, 2008). PHI offered health services but with a limited package of services, initially only 78 medical interventions were covered (Lakin, 2010).

On the housing sector, the PAN governments sought to enhance the role of private mortgage companies and financial institutions in the funding of housing. At the same time, social insurance institutions (i.e. INFONAVIT and FOVISSSTE) introduced joint mortgage schemes with private financial institutions. Payment on mortgage loans was made deductible from income tax. Additionally, programmes that offered housing subsidies for low income population not covered by social insurance, were boosted mainly for self-built solutions (Puebla Cadena, 2006, Levy, 2008).

In 2002 a new income tax law was passed. The previous one dated from the early 1980s. Some major changes were the modification of marginal tax rates and the introduction of deductible concepts for private spending on welfare services, like mortgage loans as mentioned above. In addition, a special regime for self-employed minor taxpayers with reduced rates was introduced with the aim of incorporating more people into the formal economy (OECD, 2004).

In 2007 the social insurance system for civil servants (ISSSTE) was reformed. The reform basically consisted in introducing the same changes that have been implemented in the reform of the IMSS 10 years later. The old-age pension scheme was semi-privatised too and changed from a pay-as-you-go system to an individual capitalisation one. Other changes to make the system analogous to the IMSS were considered, however, significant concessions were made as part of the negotiations with the trade unions, for example, the minimum guaranteed pension was set at

two minimum salaries and not one as in the case of the IMSS system (OECD, 2009, LISSSTE, 2007).

Finally, in 2011 spending on private education was made deductible from income tax, like spending on private health services. The limit to deduce this amount was the average per capita spending in public education (SHCP, 2011). It can be interpreted that with this reform, the government tried to benefit middle and high class groups, the traditional PAN support groups, in the middle of the crime wave that has affected the country since 2006.

### **3.3.2. Main Features of the Mexican Reforms**

There are some core features that can be highlighted of the reform process. First, the decline of the centrality of the social insurance system for welfare provision. Barba (2006) described the Mexican social insurance institutions as the main articulation mechanism between the ISI model, the corporatist pact of the state and the industrialising coalition, and the breadwinner system. So, as Barrientos (2004) points out, when the ISI model was dismissed throughout Latin America, social insurance lost its support, especially from the state and employers; at the same time the group that could have supported social insurance, namely organised urban formal sector workers, was diminishing in number and power due to economic liberalisation policies. Indeed, the informal economy has been increasing; data from official government surveys show that the percentage of workers with access to social insurance out of the total salaried subordinated population, which is the population who should be insured by law, fell from 56 percent at the end of 2000 to 52 percent in December of 2010 (INEGI, 2011b); and coverage percentage out the total population by the private sector workers' social insurance system, which increased steadily since its creation in the 1940s, picked in 1990 at 47.5 percent, then stalled and in 2010 it remained at the same level (46.6%).

A second feature of the social policy shift has been the growth of social assistance programmes for poor families with no social insurance. Social programmes mainly aimed at combating poverty have always been part of the Mexican welfare system, especially after the 1960s, when an expansion of the system was attempted in response to several political crises, but those programmes changed constantly and many of them would be eventually cancelled as part of the economic structural reforms. (Barba, 2006). The new social assistance programmes vary in

several way, they have been larger in scale and more institutionalised. The largest of these social assistance programmes is *Oportunidades*, but they also include Popular Health Insurance, assistance non-contributory pensions, day care centres and housing subsidies; their expansion has resulted in a steady increase of social spending since the second half of the 1990s. According to data published by the Economic Commission for Latin America and the Caribbean (CEPAL/ECLAC), social spending at the Federal level in Mexico as a percentage of GDP increased from 8.44 in 1995 to 12.5 in 2008, while per capita social spending almost doubled from 450 to 885 US dollars in the same period (CEPAL, 2011).

The centrality of the market as part of the social policy paradigm that has been deployed during the past two decades could be another of the feature of the policy shift. *Oportunidades* stands out for its attachment to this new market logic. As two of its creators have stated, the programme is inserted in a logic under which public policies should help poor families improve their conditions through market participation (Levy and Rodriguez, 2004). Barba (2005) identifies this logic with the shift towards productivist policies, which are in tune with the social investment logic. This relinquishment to market mechanisms in the social realm can also be observed in the pension reforms of 1997 and 2007, where private firms were put in charge of administering old-age and retirement pension funds and of the delivery of benefits, whilst pension amounts will depend on the investment decisions of those firms. Additionally, tax deductions on income tax for private health and educations spending and payment of interests on mortgage loans, can also be seen as means to subsidise private arrangements within the social sphere.

Another feature of the reforms is the emphasis on targeting mechanisms. Again the design of *Oportunidades* provides the best example for this feature in Mexican social policy (Levy, 2006, Levy and Rodriguez, 2004); but the rest of the recently implemented social programmes also emphasise the focalisation on low income groups (e.g. non-contributory pensions only cover old-age adults in localities of less than 30,000 inhabitants, which are assumed to be the poorest; eligibility for day care centres is restricted to children of women living in households with an income of 1.5 minimum salaries or less; whilst the different housing subsidies also apply means-testing mechanism). The exception could be voluntary Popular Health Insurance, which attempts to expand health services with a more universalistic logic, but considering that poor families are exempted from paying their share of contributions, it could also be depicted as a programme

targeted at poor population. One of the consequences of the targeting approach could be that, given the increase in informality, many low income families not in extreme poverty could be left unprotected because they do not qualify for the benefits but do not have access to social insurance either. (Lautier, 2001)

A new residual welfare paradigm has emerged in Mexico (Franco, 2006, Barba, 2005, Lautier, 2001, Barrientos, 2009). The development of social policy shows a shift in the design of the recently introduced policy instruments. However, the old paradigm has not been abandoned. The new paradigm coexists today with the traditional paradigm, which has not been totally dismissed. In fact, resources devoted to social insurance programmes still exceed considerably the resources spent on social assistance. These thesis aims to uncover what have been the redistributive effects of these policy changes.

### **3.4. Research on Social Protection in Latin America and Mexico**

This section reviews the relevant literature on the social policy reforms in Latin America and Mexico. The first part focuses on cross-national studies of the region that include Mexico, the second part outlines research conducted exclusively on Mexico. The literature reviewed is associated to research conducted to identify the effects and outcomes of social policies. The review includes literature published in English and Spanish.

#### **3.4.1. Research on Latin America**

Research on Latin American social policy is still scarce considering its long history, the fundamental role that it has played for the development of most countries and the fact that during the last decades, the region has become the world's 'laboratory' of social policy with innovations like the privatisation of pension systems and the creation of conditional cash transfer programmes. Many Latin American countries have registered a decrease in rates of poverty and inequality during the second half of the 2000s, some of the authors reviewed for this section analysed the effects of social policies before that decrease, others published their studies after the decrease.

In some occasions, Latin America has been integrated into broader studies of welfare in the ‘developing’ regions of the world (Rudra, 2007, Gough, 2004). Whilst studies like those could be valuable in mapping some broad trends in social protection development, the large scope they try to embrace and the wide differences among the regions they try to focus on, makes it difficult to obtain a clear and in-depth understanding of the inputs, outputs and outcomes of social policies.

Mesa Lago (2000, 2001, 2004), Filgueira (1998) and Barrientos (2004) represent the pioneers of the field. Mesa Lago (2004) came up with the first typology of countries according to the characteristics of their social protection systems during the development phase. He grouped countries in three categories: i) pioneer countries, which introduced their systems around the 1920s, covered a large percentage of the population, offered protection against all major social risks, and had higher levels of contributions, expenditure and financial disequilibrium (e.g. Southern Cone countries, Brazil and Costa Rica); ii) intermediate countries which implemented social security systems around the 1940s and 1950s under the influence of the International Labour Organisation (ILO), exhibited a more unified system without the diversity of stratified insurance funds present in the pioneer group, registered lower levels of coverage and did not offer protection against all risks, especially unemployment, and had lower levels expenditure (where Mexico was placed along with Colombia, Venezuela and others); and, iii) latecomers, which implemented their systems during the 1960s and 1970s, only covered a minority of their populations, did not include all insurance branches either, and exhibited lower contribution and expenditure levels (e.g. most of Central America) (Mesa-Lago, 2000). Mesa-Lago later analysed the impact of the reforms, especially of the privatisation of pension systems, and concluded that they were generating negative results like the reduction in coverage levels, high administrative costs and low return on the resources deposited in individual accounts (Mesa-Lago, 2001, Mesa-Lago, 2004). The author revised his typology after the reform phase up to the mid-2000s, but concluded that the same three groups continued to be identifiable, without any changes.

Filgueira (2005, 1998) also developed a typology of countries based on their social protection system. Mesa-Lago’s work was criticised for focusing exclusively on social security systems and for being too descriptive (Segura-Ubiergo, 2007, Filgueira, 2005). Filgueira (2005, 1998) incorporated variables related to welfare outcomes in his typology. He based his classification on the coverage of the social security systems, social spending levels and distribution, social

development indicators and on the analysis the political economy of social protection systems. Three welfare state types were identified by the author: stratified universalistic, in countries with more developed social security systems, dual in countries where systems did not evolved to cover all the population (i.e. leaving out rural and informal groups), and exclusionary where the state did not protected the majority of the population. Filgueira argued that the first type is the one that more resembles the conservative European model. Mexico was placed in the second group, as a dual type of state. The author has argued that after the reforms these types were no longer valid and that countries in the region had taken different paths; for Mexico the author commented that the post-reform model was characterised by its search for efficiency and fiscal responsibility, limited coverage and targeted programmes for the poor aimed at reducing future poverty levels rather than combating present ones.

Barrientos (2004, 2009) applied the welfare regime approach to the region. This author argues that one unique welfare model can be identified for the entire region. He concluded that a regime change had taken place, from one that resembled the conservative model identified by Esping-Andersen (1999, 1990) for Continental European countries, to one more similar to the liberal model of Anglo-Saxon countries. In his work Barrientos has looked at the welfare mix, welfare outcomes and the welfare systems' stratification effects before and after the reforms. He especially found similarities with what has been identified as a Southern European variant of the conservative regime; however, features like the limited coverage of social security to formal sector workers, a narrow specification of social risks and residual welfare policies led him to label this regime conservative/informal. The author then argued that a different pattern had emerged after the reforms, as the welfare mix was modified because of the reduction in employment protection, the privatisation of social insurance schemes, the decentralisation of education and health services, the enhancement of the private sector's role in welfare provision and financing and the introduction of targeted-productivist social assistance programmes; he called this new regime liberal/informal. Barrientos has also suggested that the social assistance policies (e.g. the Oportunidades programme in Mexico) reduced the role of the labour market as stratification device, a situation which he warns is not entirely positive and that more than the expansion of the welfare system, it signals the downgrading of protection schemes for formal groups and the emergence of weakly institutionalised assistance programmes.



Martinez Franzoni (2008) developed a typology of Latin American social protection systems in 2008. This author applied cluster analysis to classify identify the region's welfare regimes according to levels of commodification, decommodification, defamilialisation and welfare outcomes. She identified three regimes: 'state-targeted' (only Argentina and Chile), 'state-stratified' (Brazil, Mexico, Uruguay, Costa Rica and Panama) and 'informal-familialist' (the rest of the countries). Results showed that in all three informal welfare arrangements were relevant to a certain extent, however, in the first two the state was more active in protecting citizens against social risks, whilst in the third one the state played a minor role and individuals relied mostly on families for protection. Differences between the 'state-targeted' and the 'state-stratified' regimes stemmed from the features of their social policies: in the former targeted policies were more important, in the latter countries presented more universal but more stratified systems between occupations and formal and informal groups. Mexico fell into the state-stratified regime, but with some exceptions from the other countries in the same group, namely lower levels of social spending and a more profoundly reformed system.

Lautier (2001) also analysed the social policy shift in Latin America. This author argued the reduction in insured employment is generating an increase in what he calls a 'no man's land' where precarious workers who are not poor or not poor enough to qualify for the targeted programmes, fall and are left unprotected by the welfare system. As possible causes for the reduction in formal employment, Lautier pointed to the downsize of the public sector and the privatisation of public enterprises, and the reduction in employment of strategic private firms where workers enjoyed privileged protection levels along with a movement towards outsourcing. He also described the changes in social assistance, which role has been enhanced as part of the policy shift. On social assistance he also observes that in the pre-reform era this types of policies functioned with a populist logic, but after them, a 'focalisation' logic was introduced, although their populist character has not been entirely dismissed. Lautier warns that his observations are more theoretical than empirical but that they could be enriched by subsequent research. He first published this paper in the late 1990s; back then he suggested two possible paths that Latin American nations could follow two possible paths given the failure of neo-liberalism to engender an articulated political and social project: either neo-populism or social chaos.

Franco (2006) describes the two paradigms that coexist in Latin American social policy after the reforms. On one side, there is a 'traditional' paradigm which postulates the monopoly of the state over social policy in all its aspects like financing, design, implementation and control; a homogeneous offer of benefits for all beneficiaries, despite the peculiarities of different population groups, with the idea that it will promote social cohesion and equality; a gradual expansion of coverage levels and the incorporation of all population groups according to the available resources; and an emphasis on means, assuming that undertaking the planned actions will yield the expected objectives. On the other side, there is an 'emergent' paradigm introduced in Latin America after the debt crises of the 1980s, which postulates that the capacity for innovation and resolution of problems does not reside exclusively in the state but is dispersed throughout society (e.g. local governments, the private sector, non-governmental organisations and families); that insists on recognising the capacity of individuals to make their own choices and prefers the handover of public resources to beneficiaries so that they can satisfy their needs through the market (i.e. subsidising demand instead of offer); advocates for the co-responsibility of beneficiaries and the decentralisation of services; places the emphasis on the neediest groups, by attempting a precise targeting of potential beneficiaries; and underscores the importance of the impact of programmes measured in comparison with their initial objectives. The author points out that the 'emerging' paradigm can be observed in the design of recent social assistance policies introduced to combat poverty (e.g. CCT programmes) and in the reforms to the social security systems and other social policy sectors. The author underscores that the amount of resources devoted to the 'traditional' paradigm programmes is still much higher, and that this is still the dominant paradigm in the region. He finalises by warning that both the potential and achievements of CCT programmes designed under 'emergent' paradigm principles have been largely overstated; an observation also shared by authors like Lloyd-Sherlock (2008) and Damian (2007).

Lautier (2001) analysed the social policy shift at the end of the 1990s, and argued the reduction in formal employment was generating an increase in what he called a 'no man's land' where precarious workers who are not poor or not poor enough to qualify for targeted social assistance programmes were falling and were being left unprotected by the welfare system. As possible causes for the reduction in formal employment, Lautier pointed to the downsize of the public sector, the privatisation of public enterprises, the reduction in employment of strategic private

firms where workers enjoyed privileged protection levels, and a movement towards outsourcing jobs. He commented that the expansion of social assistance policies, which had moved from a marginal position towards occupying an increasingly central in the social protection systems, was insufficient to fill the ‘no man’s land’.

Lavinas (2013) discussed the expansion of social protection through conditional cash transfers. She argued that the success of these programmes was exaggerated and that their promotion as tools for effective social protection was due to their compatibility with the neoliberal economic model. The author argued that conditional cash transfers had a limited potential to redistribute income because of their residual nature and low spending levels; hence their impact on the reduction of inequality in some Latin American countries was at best minimal, if not non-existent. Additionally, she affirmed that in the absence of comprehensive social protection systems, the objective pursued by conditional cash transfers of commodifying of the poor was more likely to leave them in a state of higher vulnerability to labour market forces. Finally, she concluded that whilst the traditional social policy paradigm had the aim of protecting workers under equal conditions, the twenty-first century paradigm based on residual policies eventually leads to ‘the downsizing of social protection in the name of the poor’.

Huber and Stephens (2012) published a study on the most recent changes in Latin American social policy. They noted that democracy has had a positive effect on increases of social spending and in levels of poverty and inequality. Additionally, they argued that countries with strong leftist political parties and governments had influenced the creation of more universalist types of social protection, and those were the countries that showed a better redistributive potential.

In sum, recent literature on Latin American social policy agrees that the centrality of the corporatist welfare model diminished as the importance of the liberal model increased. The extent to which a full shift in the welfare model has taken place is debatable, and more probably both paradigms have ended up coexisting. The enhancement of the liberal paradigm is observable in the introduction of social assistance policies, notably conditional cash transfers programmes. Many authors agree that these programmes have a limited potential at reducing poverty and inequality. The literature reviewed here did not include authors which have argued

that in recent year several countries have entered a post-neoliberal phase, where the state has assumed a stronger role in welfare provision. This has not been the case of Mexico. The authors that have developed typologies of social protection systems agree that this country is where a shift towards a liberal-productivist type of social policy with lower levels of social spending is more evident. The next section centres on the studies conducted exclusively for the Mexican case.

### **3.4.2. Research on Mexico**

#### **3.4.2.1. Research on the Welfare Model**

This section reviews the most recent work on the effects and outcomes of social policy reforms in Mexico. The review includes authors that have characterised the country's welfare model after the reforms, and more importantly for this thesis, authors that have estimated the redistributive effects of social policies.

Bayon (2009) offers a characterisation of the welfare model that has emerged after the transformation of social policy in the country. This author reviews changes in healthcare, pensions, employment legislation, education and the family sphere, and variations in some basic indicators of each area. She argues that the neoliberal shift has exacerbated inequality, poverty and social exclusion and that in contrast to other Latin American countries, the consolidation of democracy has not been accompanied by a revision of the neoliberal economic model or its social consequences, although she does not offer any extensive explanations for the causes of that continuity. The author concludes that the state has assumed an increasingly residual role in welfare provision limited to population in extreme poverty, that healthcare and pension reforms have deepened the historic segmentation of the system and that the informal component of the system reflected in the role of the family as welfare provider, has been emphasised.

Dion (2010) published what is probably the most detailed account of the history of social policy in Mexico. She is mostly interested in identifying the social, political and economic arrangements that triggered and shaped the development of social protection policies, She argues the processes of political and economic liberalisation, propelled the relative retrenchment of social insurance and the expansion of social assistance programmes. But the author also offers

characterisations of the country's welfare model before and after the reforms. She concludes that the country transited from a corporatist to a liberal/residual model, like Bayon, but she also highlights the significant expansion of social protection that the introduction of social assistance represented.

#### **3.4.2.2. Research on Labour Market Effects**

On the effects of social policy changes at the meso-level, recent debate on social policy in Mexico (Lustig, 2010, Foust, 2010) has centred around Levy's (2008) work. This author has argued that the new social assistance programmes provide incentives for workers and firms to stay or move towards informality. Levy carried out econometric analysis and concluded that social security contributions provide disincentives for private investment and that social assistance programmes promote low productivity informal jobs and affect economic growth. He proposed a system of universal benefits funded by an increase in consumption taxes. The extent to which his proposal would in fact represent a universal system is debatable, because he suggests keeping family benefits, i.e. the *Oportunidades* programme, as a targeted social assistance programme. In addition, Lustig has suggested that this proposal would produce a downsizing of benefits for the present social insurance beneficiaries and would end up affecting most workers apart from those in the first two income deciles. However, even for these workers, the immediate impact of increasing consumption taxes would be negative even if in the future those in the informal economy would be able to enjoy an old-age pension.

#### **3.4.2.3. Research on Redistribution**

The work of Esquivel et al (2011) and Scott (2013) is relevant for the study of the redistributive effects of social policies. Mexico registered a drop in inequality between 1996 and 2006, although it has later increased. Esquivel et al (2011) investigate the determinants of that reduction. During that period the Gini coefficient for total per capita household income decreased from 0.543 to 0.498. The authors modelled several probable causes with data from the National Income and Expenditure Survey (ENIGH)<sup>6</sup>, among them two social policies: pension

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<sup>6</sup> They included several causes in their model: demographic changes, labour income and non-labour income, the latter consisting of private and public transfers. The data source was the National Income and Expenditure Survey (ENIGH).

programmes and *Oportunidades* social assistance benefits. Three determinants were found to be the main contributors to the reduction in inequality: the relative rise in wages of low-skilled workers, remittances from migrants and the *Oportunidades* programme. On the other hand, pensions were found to be among the causes actually generating inequality.

Esquivel et al (2011) also published a study on the distribution of taxes and benefits based on the work of Scott (2013, 2009). This author has been conducting incidence analysis to estimate the distributive effects of taxes and social spending per income deciles, using data from national income and expenditure surveys. The analysis included spending on healthcare, education, state contributions to pension systems from general revenues, subsidies to the rural sector, consumption subsidies and programmes targeted at the poor were included. The study published in Esquivel et al (2011) corresponds to the year 2006; it was possible because for that year, at the request of the Secretariat for Social Development, the survey introduced a special module on social programmes. In 2013 Scott (2013) published similar studies for 2008 and 2010.

For 2006, Scott (2013) found that only 42 per cent of total spending was progressive in absolute terms, i.e. the poor received more in per capita terms than the rich. Of the rest, 47 per cent was regressive in absolute terms, i.e. the rich received more per capita even if the poor got more in proportion to their income, and 11 per cent was openly regressive, i.e. benefits represented a higher proportion of the rich's income, actually increasing inequality (p. 285). The programmes found to be more progressive were those targeted at the poor, healthcare for the uninsured and education, whilst social insurance programmes were found to be regressive, and among these the most regressive were pensions for public sector employees. In general, according to the author social spending had a positive effect in reducing inequality in 9.3 per cent. This result is mainly due to the inclusion in the study of education, which represents the largest proportion of social spending and was found to be progressive.

For 2006, Scott (2013) found that a low redistributive effects of the tax/benefit system that reduces the GINI coefficient in only 12.6 per cent, compared to reductions of up to 50 per cent in other OECD member countries. For 2008 and 2010, the author estimated a reduction in income inequality of 15.3 and 15.9 per cent of the Gini Coefficient, respectively.

On the net gains in final income after taxes and benefits, Table 2 compares the results of Scott's studies for 2006 and 2010. The table shows the percentages in which taxes and benefits increase or decrease original income, and the net gains after the application of both, per income decile. The 2010 study estimated net cash gains and net gains including benefits in-kind. According to Scott, in 2006 taxes represented 6.7 per cent of the original income for the first income decile, whilst for the tenth decile the proportion increased to only 13.9. The net effect, subtracting taxes from benefits, was 68 per cent for the lowest families and -9 per cent for the highest decile. In 2010, taxes remain at similar levels, but benefits register significant increases for the first two deciles; for the third and fourth deciles net gains also increased but at more modest levels. It is interesting to observe how the value of benefits in-kind increases final income; according to Scott this is mainly due to healthcare and education services.

**Table 2. Incidence of Taxes and Benefits (% of Original Income)**

Income Decile	Benefits		Taxes		Net Effect		
	2006	2010	2006	2010	2006	2010	
					Total	Cash	Total
1	74.7	105.8	-6.7	-6.4	68	32.1	137.9
2	43.7	45.9	-5.9	-5.1	37.8	8.1	54
3	32.5	32.8	-6.9	-6.1	25.6	2.6	35.3
4	26.6	25.1	-7.6	-6.3	19	0.0	25.1
5	21.9	20.3	-7.5	-7.8	14.4	-2.8	17.5
6	18.5	16.3	-8.7	-8.2	9.8	-4.2	12.1
7	16.4	12.2	-8.5	-8.9	7.9	-5.7	6.5
8	13.6	9	-10.2	-10.3	3.4	-7.5	1.6
9	10	6.3	-11.5	-11.6	-1.6	-9.4	-3.2
10	4.8	2.2	-13.9	-14	-9	-12.7	-10.5

Sources: Scott (2013)

Scott's calculations would suggest that the levels of vertical redistribution of the Mexican tax/benefit system have increased in recent years. However, these research does not generates a comprehensive assessment of the reform phase because of the period covered. To fully assess the

reforms, it would be necessary to go back in time before the reforms were introduced, which not be possible using data from income and expenditure surveys because of the absence of the necessary variables. In addition, Scott's research does not permit a deeper analysis of the mixed effects of fiscal and social policies on population groups that share other attributes apart from income level. This is especially relevant for the Mexican case when the attachment of the household earners to a fragmented labour market determines the access to social benefits and services, more so than in other countries where the wedge in the entitlement only distinguishes between employed and unemployed. What is required then is to take the analysis to the micro-level in order to reveal not only the system's vertical but other modes of redistribution too, on families representative or illustrative of the diverse spectrums of society. As Scott concludes, a next step could be to develop taxes and benefits simulation models; these models would allow the identification of different redistributive effects across specific types of families or households.

The Organisation for Economic Cooperation and Development (OECD) publishes data on the impact of tax/benefits systems on income of different household types for several member countries; but no data is provided for Mexico (OECD, 2014). Lopez-Calva and Urzua (2011) mention that in Latin America models for the simulation of the effects of tax/benefit systems on households are still in the development stage. These authors have recently led an effort for the integration of such models for five countries in the region including Mexico. The authors comment that Latin American countries do not have a tradition of designing micro-simulation models, in contrast to Europe where they are extensively used.

These models are meant to simulate the structure of the system of taxes and benefits at the micro level, usually on households or individuals, to estimate the system's impact on income distribution, levels of poverty and inequality or in general on the overall welfare generated by fiscal and social policy changes. The advantage of micro-simulation models is that they can account for the heterogeneity and diversity of the population's attributes in contrast to econometric models that simulate policy impacts at a more aggregate level (Lopez Calva and Urzua, 2011). The volume 'Taxes and Benefits Systems in Latin America' edited by Lopez-Calva and Urzua, explains the initial steps taken towards the integration of the models,



nonetheless, the results of their application were not yet available at the moment of the writing this thesis.

Absalon and Urzua (2011), responsible for the Mexican model, describe the country's tax/benefit system, the available data for the integration of the model and their characteristics, the variables and assumptions they were making for the integration of the model. The source for the data that was being used was the 2008 ENIGH. Table 3 lists the components of the Mexican tax/benefit system as identified by the authors. The table includes the institutions that collect the taxes or contributions and/or provide the benefits or services, and it specifies whether the authors were going to include or exclude each element depending on its availability in national surveys.

**Table 3. Variables of the Tax/Benefits Simulation Model of Absalon and Urzua**

<b>Tax/Benefit</b>	<b>Institution(s)</b>	<b>Simulated</b>
<b>Direct taxes</b>		
Personal Income Tax	SHCP	Yes
Corporate Income Tax	SHCP	No
Property Tax	Municipal governments	Partially
Car Ownership Tax	State governments	Partially
<b>Indirect taxes</b>		
VAT	SHCP	Partially
Excise taxes	SHCP	Partially
Import taxes	SHCP	No
Social security contributions	IMSS and ISSSTE	Yes
<b>Benefits</b>		
Oportunidades	SEDESOL	Yes
Procampo	SAGARPA	Yes
School breakfasts	DIF	No
Milk social subsidies	LICONSA	No
Temporal Employment Programme	STPS	No
Old-age pensions	IMSS and ISSSTE	Yes
Survivors pensions	IMSS and ISSSTE	No
Pensions disability	IMSS and ISSSTE	No
Sickness cash benefits	IMSS and ISSSTE	No
Maternity cash benefits	IMSS and ISSSTE	No
Housing loans	INFONAVIT and FOVISSSTE	No
Popular Health Insurance	SS	No

Source: Absalon and Urzua (2011).

On the tax system, the only direct tax that the model would include was personal income tax, including the deduction of allowances and subsidies. Corporate income tax, the other tax collected at the federal level, would be excluded because the ENIGH does not identify it. The amounts for two taxes collected by local governments would have to be imputed based on some

data from the ENIGH since the survey did not record the specific amounts paid for such taxes. On indirect taxes, for VAT, namely sales tax, the authors were planning on assuming fixed amounts for the consumption goods or fixed expenditure proportions, since the ENIGH did not record it either, as was also the case of excise taxes, namely special taxes on goods like alcohol or tobacco, so only the tax on gasoline could be imputed. Import taxes were also going to be excluded because of the lack of data in the ENIGH. Regarding social security contributions, both IMSS and ISSSTE contributions were included since the ENIGH did identify their amounts paid by each household (Absalon and Urzua, 2011).

On the benefit system, Absalon and Urzua (2011) included the simulation Oportunidades family cash transfers and Procampo benefits, a programme of the Secretariat for Agriculture that consists of subsidies for farmers and peasants to compensate them for losses incurred due to the sector's trade opening, but not exactly a social protection programme. The only other benefits simulated were going to be social insurance old-age pensions. The rest of the benefits were excluded because of the unavailability of data. The authors comment that the system includes other social programmes that were disregarded because of their small scale, because they exclusively covered workers of particular organisations or because of their 'sui generis' nature.

Absalon and Urzua's (2011) study will not assess the effects of several core programmes of the Mexican social protection system, like incapacity benefits and housing programmes. Additionally, because of the absence of empirical data from the 1990s, like in the case of Scott's work, it will not be possible to assess the full effect of the reform process. This thesis aims to contribute to the literature by filling in this gap. The next section presents some general information on Mexico to provide a context for the analysis.

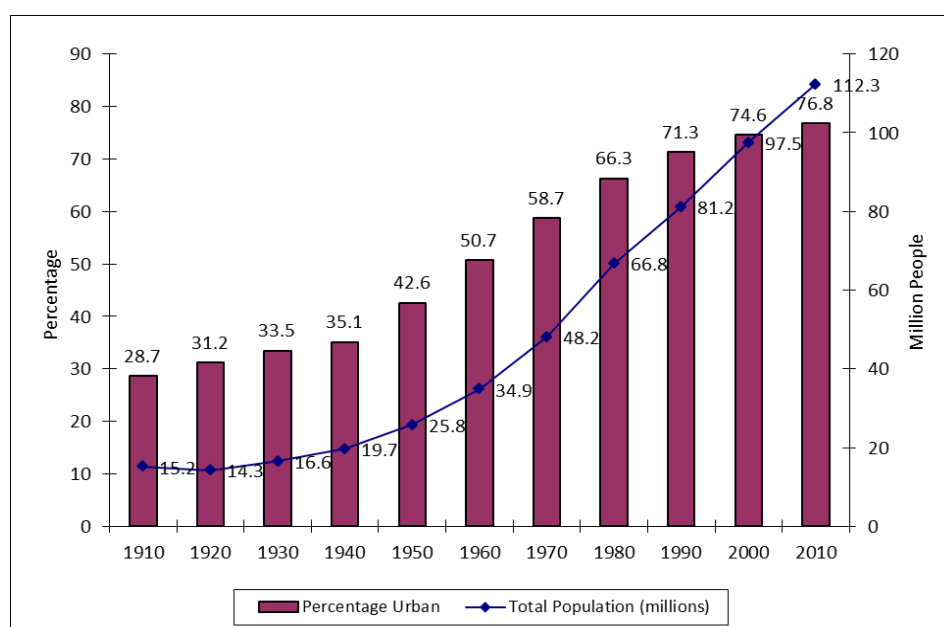
### **3.5. Socio-Demographic and Labour Market Indicators**

In 2010 Mexico had a population of 112.3 million (INEGI, 2010), it is the second largest country in Latin America after Brazil, and the eleventh in the world. It is considered an upper middle income country by its per capita income. In 2010 Gross Domestic Product (GDP) amounted to

1,644,449 million US Dlls, and GDP per capita to 14,666 US Dlls<sup>7</sup> (58th in the world) (WB, 2011).

Mexico has changed dramatically during the second half of the twentieth century. Between the 1940s and 1980s, decades of the ISI model, the country experienced the highest population growth rates in its history, with annual averages of more than 3 per cent from 1950 until 1980; total population increased from 19.7 million in 1940 to 81.2 million in 1990. At the same time, the country passed from being a predominantly rural country, with 64.9 per cent of the population living in rural areas in 1940, to a largely urban one, with 71.3 per cent in urban areas in 1990, as shown in figure 1. Since then, growth rates have slowed considerably, falling to 1.9 per cent in the 1990s and 1.4 per cent in the last decade; nonetheless total population did increase in more than 30 million, whilst the percentage of urban population reached 76.8 (INEGI, 2010).

**Figure 1. Total Population and Percentage of Urban Population, 1910-2010**



Source: INEGI (2013).

Contrary to other Latin American countries (UNDP, 2014), poverty and inequality rates have not decreased in Mexico during the twenty-first century. The methodology that the government

<sup>7</sup> Both GDP and GDP per capita adjusted by purchasing power parity (PPP).

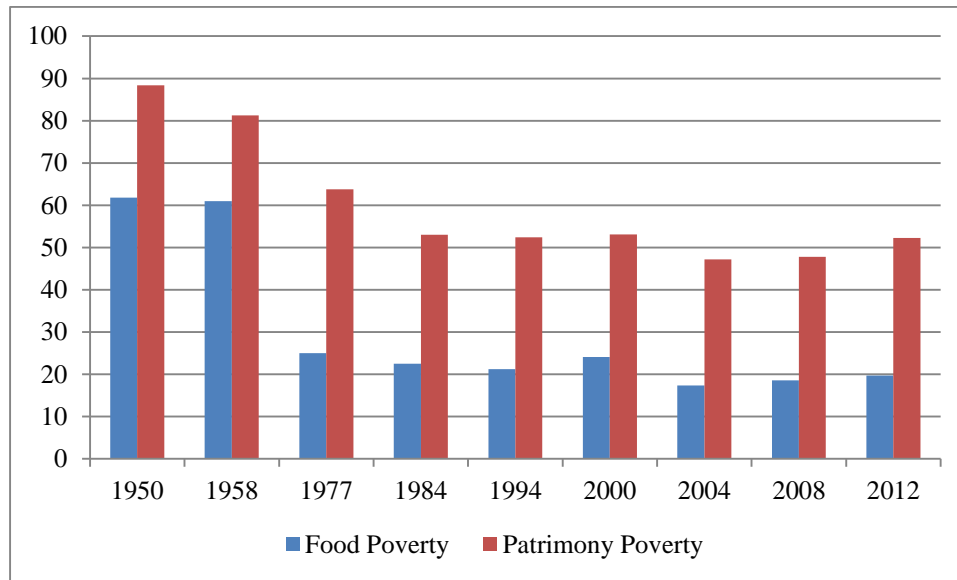
began to use to measure poverty in the early years of the twenty-first century was based on three per capita poverty thresholds. The lowest threshold was called ‘food poverty’ (*pobreza alimentaria* in Spanish) and referred to the minimum income that a person required to obtain a minimum acceptable level of nutrition. Population in households with a per capita income below that line were considered to be in ‘food poverty’ (Szekely, 2005).

The second poverty threshold was called ‘capabilities poverty’ (*pobreza de capacidades* in Spanish), which referred to the minimum income required to meet a person’s nutrition needs, education and health needs. Population in households with a per capita income that fell below this threshold was considered to be in ‘capabilities poverty’ (Szekely, 2005).

The third poverty threshold was called ‘patrimony poverty’, (*pobreza de patrimonio* in Spanish), and it referred to the minimum income that a household required to meet the nutrition, health and education needs of all its members, but also housing, clothing, and transportation needs. Population of households with a per capita income that fell below this thresholds were considered to be in ‘patrimony poverty’ (Szekely, 2005).

Figure 2 shows the variation of the percentage of the population that fell below two poverty thresholds, ‘food poverty’ and ‘patrimony poverty’, for the period 1950-2010. As can be observed, rates registered a sharp decline up to the 1980s, but have remained at the same level since. The ‘patrimony poverty’ rate dropped from 88.4 per cent of the whole population in 1950 to 54 per cent in 1984, but has since remained above 50 per cent in most years; in 2012 it was estimated at 52 per cent. Population in ‘food poverty’, also considered to be in extreme poverty, fell from 62 per cent of the entire population in 1950 to 23 per cent in 1984, but by 2012 it had just dropped to 20 per cent (CONEVAL, 2013, Szekely, 2005). In 2008 the government modified the methodology to measure poverty again, but there are no historic series on the estimation of poverty levels using the new measurements; the new methodology is described in section 6.3.1.

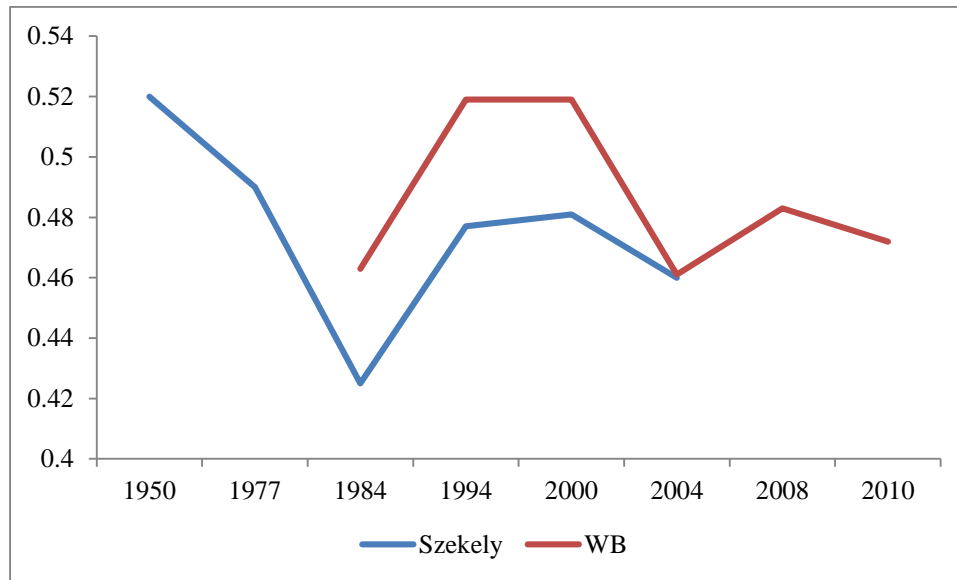
**Figure 2. Poverty Rates, 1950-2012 (% of Urban Population)**



Source: Szekely (2005) and CONEVAL (2013)

Inequality measurements have remained at high levels too. Figure 3 presents two calculations of the GINI index, a long series for the period 1950-2004 published in Szekely (2005) and the one published by the World Bank, only for the period 1984-2010 (WB, 2013). According to the first series the index dropped to its lowest point in the mid-1980s, and then rose to levels close to 0.50. The series published by the World Bank tell a similar story, with the index remaining at levels close to 0.50 during the past 30 years.

**Figure 3. GINI Index, 1950-2010**



Source: WB (2013) and Szekely (2005)

In addition, according to estimations presented in Hansen (1971), in 1950 the richest 20 per cent of the population concentrated 59.8 per cent of total income, whilst the income of the poorest 20 per cent only represented 6.1 per cent. Estimations published by the World Bank suggest that by 1984 income distribution improved, as the share of income of the fifth quintile decreased to 52 per cent, but by the late 2000s the situation had worsened again and in 2008 the share of the richest quintile had risen to 56.2 per cent, whilst the share of the other quintiles had declined, with poorest quintile obtaining only 3.9 per cent (WB, 2011).

These indicators could suggest problems with the design of fiscal and social policy in Mexico. In spite of their recent expansion, it would appear that the social programmes introduced in recent years have failed to lift poor families above poverty thresholds and to redistribute income in a more equal way.

At the same time, Mexican society has been rapidly changing in recent decades. The ageing of the population has accelerated as life expectancy increased and the fertility rate has fallen. More women have joined the labour market, and the numbers of lone mothers and female headed households have increased dramatically (INEGI, 2013). These and other changes pose challenges

for the design of social policy, as the capacity of families to care for their members decreases, whilst the needs for social protection increase. Specific changes include the following (all data taken from government national surveys):

- A rise in the participation of women in the labour market. According to data from the 1990 census show female labour force participation rate was 19.9 per cent<sup>8</sup>, whilst in 2011 the rate was estimated at 42.2 per cent.
- The percentage of female led households out of the total number of households increased from 17.3 per cent in 1990 to 24.6 per cent in 2010.
- The average size of households has decreased from 4.7 members at the beginning of the 1990s to 3.9 in 2010.
- The proportion of households comprised by extended families out of the total households increased from 19.6 per cent in 1990 to 24.5 per cent in 2000 and then fell slightly to 23.6 per cent ten years later. This means that in 2010 three out every ten Mexicans lives within an extended family.
- Population is still relatively young, with a median age of 26 years. The decline in fertility rates has reduced the percentage of underage dependants younger than 16 years to 29.3 per cent in 2010 from 38.6 per cent in 1990. The country has entered a phase where the working-age population constitutes the majority; dependency rates have fallen from 74 underage or old-age dependents out of every 100 people in working age in 1990, to 55 in 2010.
- Nonetheless, the population is also ageing rapidly product of the decline in fertility rates along with the reduction in mortality rates. The percentage of elderly people above 65 years old increased from 4.2 per cent in 1990 to 6.3 per cent in 2010, and if current trends continue, according to projections by the National Population Council it is projected that in three decades one out of every five Mexicans will have 65 years or more.

The labour market has also experienced great changes in the past seven decades. In 1950 the primary sector employed 58.3 per cent of workers; later, as people began migrating to urban

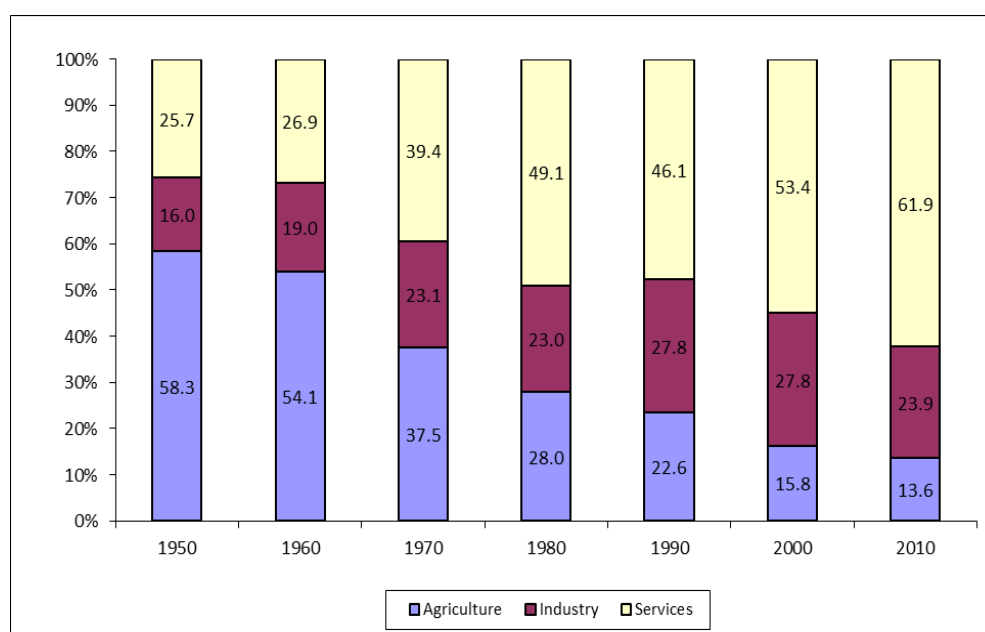
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<sup>8</sup> Census data usually underestimates this rate by 6 points, nonetheless, figures do suggest an increase of 15 points or more in the last 20 years.



areas and the country became more industrialised, the proportion of workers in the secondary sector began to rise, although, it was the services sector the one that grew faster at the expenses of the decline in agricultural employment. As can be observed in figure 4, between 1950 and 1980 employment in the secondary sector grew by 7 points, whilst employment in the tertiary sector increased by more than 20 points. After a boost to the industrial sector after the liberalisation of the economy, in the past decade its proportion of employment fell to 23.9 per cent.

**Figure 4. Employment per Sector of Economic Activity, 1950-2010 (% of Working Population)**



Source: INEGI (2013).

Population growth and the changes in employment structure explain the emergence of the large urban informal economy. Even if rural migrants might have provided the labour force for the country's industrialisation, the large majority of them and their descendants were not absorbed by industry, but instead joined precarious services jobs or became self-employed in small scale activities. Unlike industrialisation processes in core capitalist countries, in Mexico the ISI model was never able to create a strong domestic market and to generate enough industrial jobs to incorporate the large numbers of people who migrated from the countryside (Brachet-Marquez, 2007, Brachet-Marquez and De Oliveira, 2002).

The national statistics office (INEGI) recently modified its definition of informal economic activity in the country. Traditionally informality was measured by the number of people employed in firms that avoided the payment of all taxes and did not keep proper accountancy records. In 2012, the proportion of people employed in such firms, whether they were self-employed, employed by someone else or the employer, amounted to 27.9 per cent of the workforce. However, this definition does not consider the people employed in firms that could be paying some taxes, but that lacked employment protection and social security coverage. Two definitions of informality were adopted to address this omission.

- The informal sector was defined on the basis of the characteristics of the economic unit (or firm). When the economic unit operated on family resources and did not keep basic accountancy records, the person was deemed to be employed or self-employed in the informal sector. In 2012 this number represented the 27.9 per cent of the workforce mentioned above.
- Informal employment was defined on the basis of the employment conditions. This concept refers to all employment that lacks the protection of the legal and institutional framework, whether the economic unit falls in the definition of the informal sector or not. When these workers are added, the size of informality increased to 59.8 per cent of the workforce in 2012.

The INEGI began estimating both concepts in 2005, since then the percentages have not changed. These concepts are important because the employment profile of the earner determines the access to social benefits by the entire family. Table 4 shows the segmentation of the labour market in Mexico applying the two definitions of informality. Data was taken from the national employment survey. Horizontal columns refer to the characteristics of the economic unit, namely to the first definition explained above; vertical columns refer to the type of employment, namely to the second definition.

**Table 4. Workers per Type of Employment (Thousands of Workers)**

Sector	Type of Employment							
	Waged Workers		Employers		Self-employed		Total	
	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Formal
<b>Informal Sector</b>	<b>5,828</b>		<b>904</b>		<b>9,997</b>		<b>16,729</b>	
<b>Formal Sector</b>	<b>12,549</b>	<b>17,698</b>		<b>1,301</b>		<b>1,272</b>	<b>12,549</b>	<b>20,271</b>
<b>Total</b>	<b>18,377</b>	<b>17,698</b>	<b>904</b>	<b>1,301</b>	<b>9,997</b>	<b>1,272</b>	<b>29,278</b>	<b>20,271</b>

Source: Adapted from INEGI (2014a).

The number of waged workers amounts to 36.1 million workers; however, out of that total, 18.4 million (51 per cent) are informal workers. Of the number of informal workers, almost six million are employed in the informal sector, that is firms that do not pay any taxes or keep accountancy records, and 12.5 million are employed are self-employed in firms that may be paying some taxes but do not comply with all their obligations, among them the payment of social insurance contributions for their employees.

Employers and the self-employed are not covered by social insurance, but in theory they should be paying taxes, like income or corporate tax. Together both of these segments represent 28 per cent of the labour force. Out of the total, 2.6 million are inserted in the formal sector and comply with their tax obligations, but the majority of 10.9 million are in the informal sector. When all the concepts are added, the total size of the workforce is 49.6 million people, of which 29.3 million workers are informal and 20.3 million are formal

The segmentation of the labour market determines the payment of taxes and reception of benefits in the following way:

- As mentioned before, the social insurance legislation only covers waged workers. This means that according to the survey, 36.1 million waged workers should be insured, but in reality only 17.7 million are covered, 49 per cent of the total. These workers would be

covered either by the IMSS if they are employed in the private sector or the ISSSTE if they are employed in the public sector.

- The IMSS reports 16.1 million insured workers and the ISSSTE 2.7 million workers (IMSS, 2013b). These figures surpass the 17.7 million because they represent real data reported by the institutions, but they illustrate the proportion of insured workers per institution.
- Employers and the self-employed are not covered by social insurance but they should be paying taxes; however, only 19 per cent comply with the tax legislation.
- Social assistance programmes would target all informal workers (and their families), which represent 59 per cent of the total labour force.

Table 5 classifies labour market segments according to the components the taxes they pay and the type of social programme they could be eligible for. The most numerous segment would be workers in informal employment, representing almost 60 per cent of the total workforce.

**Table 5. Taxes, Benefits and Percentage of Working Population per Labour Market Segment**

Component	Segment			
	Waged workers in formal private sector	Waged workers in public sector	Self-employed or employers in formal private sector	Waged workers, self-employed or employers in informal employment
<b>Taxes</b>	<b>Social insurance contributions</b> <b>Income tax</b>	<b>Social insurance contributions</b> <b>Income tax</b>	<b>Popular Health Insurance contributions</b> <b>Income tax</b>	<b>Popular Health Insurance contributions</b>
<b>Benefits</b>	<b>Social insurance IMSS system</b>	<b>Social insurance ISSSTE system<sup>1/</sup></b>	<b>Social assistance</b>	<b>Social assistance</b>
<b>Percentage</b>	<b>31%</b>	<b>5%</b>	<b>5 %</b>	<b>59%</b>

Source: Own elaboration with data from INEGI (2014a), IMSS (1997) and ISSSTE (2007) and SHCP (2002).

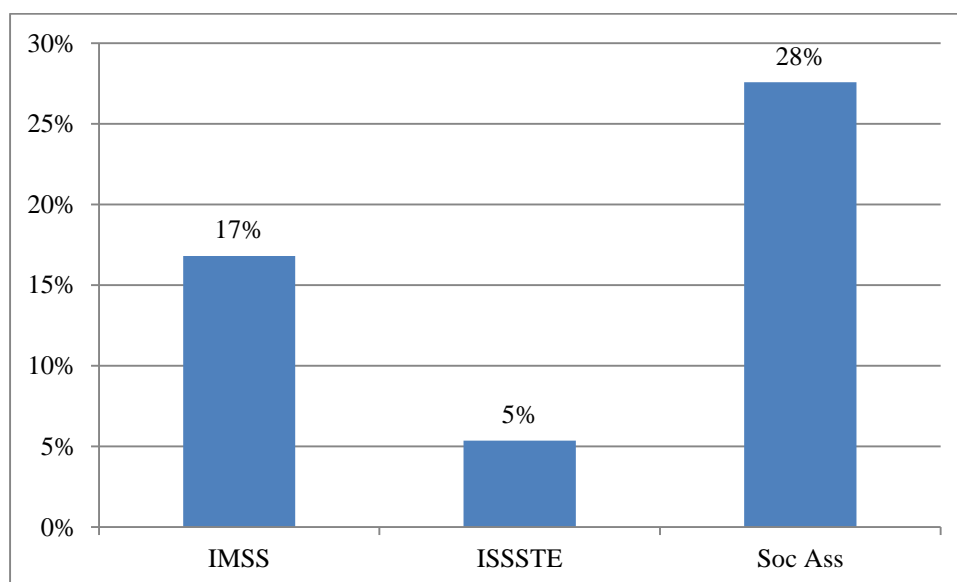
1/ The military, the state oil company and some local governments administer separate social insurance schemes, but the ISSSTE represents the largest institution.

Regarding the retired population, the number of social assistance pensioners has surpassed the number of old-age social insurance pensioners. The programme of non-contributory pensions

just created in 2005 for people who are 70 years or older and are not eligible for a social insurance pension reached 3.1 million pensioners in 2012 (Presidency, 2013). The IMSS system reports 3.4 million pensioners including old-age, disability and work injuries pensions; these pensioners were formerly employed in the formal private sector. The ISSSTE system reports 874 thousand including all types of pensions as well; these pensioners were formerly employed in the public sector. Considering only the number of old-age pensioners, the IMSS reports 1.9 million and the ISSSTE 595 thousand, 80 per cent of the total number of social assistance pensioners.

Figure 5 shows the coverage of old-age pension programmes of the total population 60 years or older. In total these three programmes cover 49 per cent of the population; there are other public pension programmes for oil state workers, the military and some municipal and state governments, but they do not represent a significant percentage. The figure shows that around half of the elderly people in Mexico lack any income support, but the lack of protection was worse before the introduction of non-contributory, when the social insurance system covered less than a quarter of the population the age group.

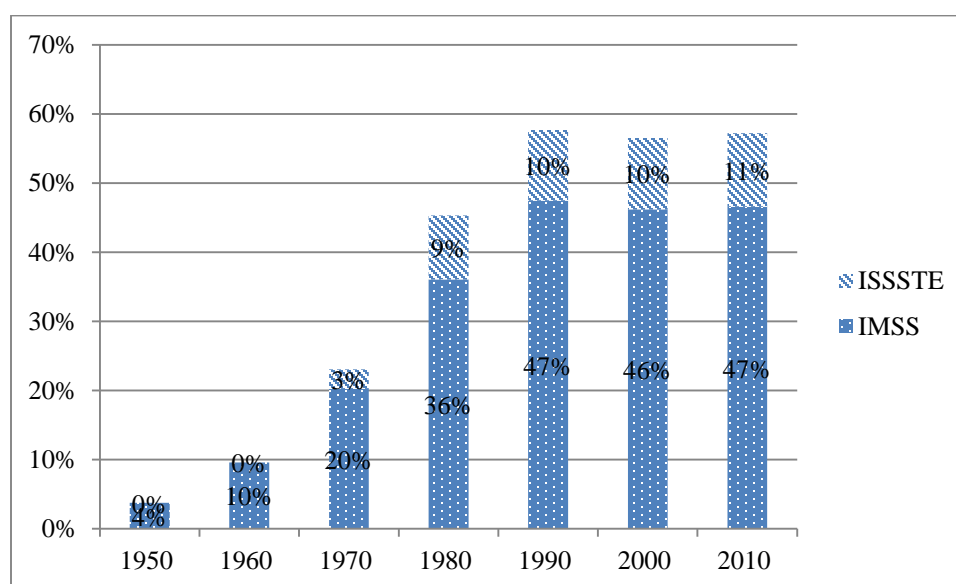
**Figure 5. Coverage of Pension Programmes, 2012 (% of Population 60 Years or Older)**



Source: Own elaboration with data from IMSS (2013b), ISSSTE (2013), Presidency (2013) and CONAPO (2013).

As commented previously, social insurance covers insured workers and their economic dependents. During the first decades after the creation of the IMSS, coverage percentages grew slowly, as expansion was focalised in the urban areas where the key industries were located. In 1950 the IMSS covered only four per cent of the total population. Coverage accelerated and by 1990 it reached almost half of the population, but has stagnated since then. Figure 6 presents the percentage of population covered by the social insurance system between 1950 and 2010. Starting in 1970 the figure includes ISSSTE coverage too. In 2010, both institutes were covering only 57 per cent of the total population.

**Figure 6. Social Insurance Coverage, 1950-2010 (% of Total Population)**



Source: Own elaboration with data from IMSS (2013b), ISSSTE (2013) and CONAPO (2013).

Social assistance targets families with no social insurance coverage. The largest of the social assistance programmes is *Oportunidades*. Coverage of this programme passed from 300 thousand families in 1997 to 6.5 million in 2012. Assuming an average of four members per family, in 2012 the programme covered 26 million Mexicans, 23 per cent of the population. *Oportunidades* is the only social assistance programme that does not limit coverage to the lack of social insurance; however, not being covered by social insurance does constitute one of the variables of the current targeting methodology, and in the past it used to have a larger weight.

Hence, 90 per cent of *Oportunidades* beneficiaries are not covered by social insurance (Damian, 2007). Coverage figures of other social assistance programmes are presented in chapters 6 and 7.

Mexican society has been changing rapidly in recent decades. Families have historically represented the main source of welfare in the country, but recent socio-demographic changes challenge its capacity to provide protection for their members. The labour market is highly segmented, and the majority of workers are not covered by the social insurance system, hence their families do not have access to comprehensive levels of social protection. Social policy reforms have been largely based on the introduction of benefits outside the traditional social insurance system. The next section maps and sketches the policy architectures before and after the reforms.

### **3.6. Policy Architectures in 1994 and 2012**

This section wraps-up the chapter by comparing the social protection architectures of 1994, before the reforms, and 2012, after the reforms. Further details on the architectures of taxes and benefits and their coverage are provided in chapters 5, 6 and 7. The comparison presented here sketches the changes in the design of social policies described in the previous sections. Table 6 presents the architecture of each policy area, consisting of the eligibility criteria, benefits, funding and administration of each social programme.

The main features of the reforms are evident. First, the reforms of social insurance system, which had at their core the retrenchment of pension programmes. Secondly, the expansion of social assistance programmes for population with no social insurance coverage. Thirdly, the centrality of the market as a mechanism for welfare provision. Fourthly, the emphasis on targeting as a tool to distribute welfare benefits. These features represent the innovations introduced during the reform phase; the thesis aims to uncover their redistributive effects.

**Table 6. Social Protection Architectures in 1994 and 2012**

Policy Programme	Area	Eligibility Criteria		Benefits		Funding		Administration	
		1994	2012	1994	2012	1994	2012	1994	2012
Healthcare									
IMSS		Private formal sector waged workers paying contributions and economic dependents	Private formal sector waged workers paying contributions and economic dependents	Free at the point of service: primary, secondary and tertiary healthcare.	Free at the point of service: primary, secondary and tertiary healthcare.	Social insurance contributions	Social insurance contributions	Tripartite institution	Tripartite institution
ISSSTE		Public sector employees and economic dependents	Public sector employees and economic dependents	Free at the point of service: primary, secondary and tertiary healthcare.	Free at the point of service: primary, secondary and tertiary healthcare.	Social insurance contributions	Social insurance contributions	Tripartite institution	Tripartite institution
Popular Health Insurance			Families with no social insurance		Free at the point of service: Limited package of interventions.		Insurance contributions (exemptions for low income families) General taxes		Secretariat of Health
Tax deductions for private spending		Income taxpayers and economic dependents	Income taxpayers and economic dependents	100% deductions from taxable income	100% deductions from taxable income	Income tax	Income tax	Secretariat of Finance Private providers	Secretariat of Finance Private providers
Pensions									
IMSS		Private formal sector waged workers meeting contribution period	Private formal sector waged workers meeting contribution period	Old-age, disability, work injuries and survivors' pensions. Defined	Old-age, disability, work injuries and survivors' pensions. Defined	Social insurance contributions	Social insurance contributions	Tripartite institution	Tripartite institution and private pension fund administrators



Policy Programme	Area	/	Eligibility Criteria		Benefits		Funding		Administration	
			1994	2012	1994	2012	1994	2012	1994	2012
ISSSTE			Public sector employees meeting contribution period	Public sector employees meeting contribution period	benefits with pay-as-you-go system. Old-age, disability, work injuries and survivors' pensions. Defined benefits with pay-as-you-go system.	contributions with individual accounts Old-age, disability, work injuries and survivors' pensions. Defined contributions with individual accounts.	Social insurance contributions	Social insurance contributions	Tripartite institution	Tripartite institution and private pension fund administrators
Non-contributory pensions '70 and more'				Persons 70 years or older with no social insurance pension.		Old-age flat rate pensions.		General taxes.		Secretariat of Social Development
Tax deductions for contributions to public and private programmes				Individuals paying income tax		100% deductions from taxable income		Income tax		Secretariat of Finance Private pension fund administrators
<b>Family Benefits</b>										
<i>Oportunidades</i>				Families below poverty line.		Conditional cash transfers dependant on the number and school level of children.		General taxes		Secretariat for Social Development
IMSS Maternity Benefits			Formal private sector waged women in work	Formal private sector waged women in work	100% of salary for 84 days	100% of salary for 84 days	Social insurance contributions	Social insurance contributions	Tripartite institution	Tripartite institution
ISSSTE Maternity Benefits			Working public sector women	Working public sector women	100% of salary for 90 days	100% of salary for 90 days	Social insurance	Social insurance	Tripartite institution	Tripartite institution

Policy Programme	Area	Eligibility Criteria		Benefits		Funding		Administration	
		1994	2012	1994	2012	1994	2012	1994	2012
IMSS Childcare		Waged women in work in formal private sector	Waged women in work in formal private sector	Childcare for children 0-4 years old	Childcare for children 0-4 years old	contributions Social insurance contributions	contributions Social insurance contributions	Tripartite institution	Tripartite institution
ISSSTE Childcare		Working public sector women	Working public sector women	Childcare for children 0-4 years old	Childcare for children 0-4 years old	Social insurance contributions	Social insurance contributions	Tripartite institution	Tripartite institution
Social Assistance Childcare			Women in work with no social insurance coverage below poverty line		Childcare for children 0-4 years old		General taxes		Secretariat for Social Development
Work Benefits									
IMSS Incapacity benefits		Private formal sector waged workers paying contributions	Private formal sector waged workers paying contributions	Sickness benefits: 60% of salary Work injuries benefits: 100% of salary	Sickness benefits: 60% of salary Work injuries benefits: 100% of salary	Social insurance contributions	Social insurance contributions	Tripartite institution	Tripartite institution
ISSSTE Incapacity Benefits		Public sector workers	Public sector workers	Sickness and work injuries benefits: 100% of salary	Sickness and work injuries benefits: 100% of salary	Social insurance contributions	Social insurance contributions	Tripartite institution	Tripartite institution
Housing									
INFONAVIT		Private formal sector waged workers paying contributions	Private formal sector waged workers paying contributions	Mortgage loans with low interests	Mortgage loans with low interests	Social insurance contributions (only employers)	Social insurance contributions (only employers)	Tripartite institution	Tripartite institution
FOVISSTE		Public sector workers	Public sector workers	Mortgage loans with low	Mortgage loans with low	Social insurance contributions	Social insurance contributions	Tripartite institution	Tripartite institution

Policy Programme	Area	/	Eligibility Criteria		Benefits		Funding		Administration	
			1994	2012	1994	2012	1994	2012	1994	2012
FONHAPO				Families with no social insurance coverage below poverty line	interests	Subsidies conditional on family contribution	(only employers)	General taxes with family contribution		Secretariat of Social Development
	Tax deductions of mortgage loans' interests			Individuals paying income tax		A percentage deducted from taxable income		Income tax		Secretariat of Finance Housing institutes (INFONAVIT and FOVISSSTE) Private financial institutions
Education										
Education services			Universal programme	Universal programme	Primary and secondary education	Primary and secondary education		General taxes		Secretariat for Education
Tax deductions for private spending				Families of individuals paying income tax		Average cost of public education deducted from taxable income		Income tax		Secretariat of Finance Private providers

Source: Own elaboration.

### 3.7. Concluding Remarks

This chapter has reviewed the history of the social policy in Latin America and Mexico and the relevant literature on the reforms that have transformed it, presented some basic information on the socio-demographic characteristics of Mexico to serve as a context for the study and mapped the country's social policy architecture. The literature presented in the chapter is relevant to justify the objectives of the thesis, which are to estimate the redistributive effects of social policy changes.

It has been argued that in no other region of the world have so many changes been introduced in the field of social policy as in Latin America during the last decades (Barrientos, 2004). Some of the reforms have represented innovations that have been imitated around the world . These two factors make the study of social policy in Latin America and Mexico highly relevant.

There seems to be agreement in the literature that the Mexican social protection system has transited towards a liberal/residual type. Rich empirical evidence provided by Scott shows that levels of vertical redistribution have increased in recent years, although no comparative analysis is offered to the moment before the reform phase began, and his insights do not go beyond redistribution among income deciles.

This thesis aims to contribute to the literature by identifying what would be the repercussions for Mexican families of the transformation of social policy, by revealing the redistributive logic of social policies not only across income levels, but also across different sectors of the population that enjoy different benefit levels, and by providing a full assessment of the reform phase by comparing redistribution of taxes and benefits between 1994, before the reforms began, and 2012. In other words, the thesis aims to identify which family types have been benefited or affected by the reforms and by which policy changes. The questions that guide the research and the methods used to empirically investigate them are presented in the next chapter.

## **4. Research Aims and Methods**

### **4.1. Introduction**

The following chapter presents the project's objectives, the methods that will be applied to try to reach them and sketches the research's design. The main purpose of the study is to assess the redistributive potential on families, of the changes in social policy that have been undertaken in Mexico during the past 18 years. A hypothetical simulation will be carried out of the taxes and benefits that a group of model households would have to pay or be entitled to. The potential effects of taxes and benefits will be simulated at two moments in time, before and after the reforms. The simulation technique that will be applied is the 'model families' method. All direct taxes and benefits of the major programmes that form the national social policy architecture of the country will be included.

The rest of the chapter is divided in four sections. The second section explains the research aims and research questions. Section 4.3 describes the 'model families' approach that will be applied in the research and its main characteristics. The fourth section presents the research design and details the general assumptions and concepts for the development of the project. It includes information on the selection process of model families, based on three dimensions: employment profile, income level and family composition; and the assumptions that are made to achieve the comparison across time. This section finalises by offering a sketch of the tax/benefit system's components, as they will be calculated for each employment profile. At the end, some concluding remarks are offered.

### **4.2. Research Aims and Questions**

To remind the reader, this research project is a comparative study of market-centred social policy reforms in Mexico at the household level in two moments in time. The thesis seeks to contribute to the literature on Mexican social policy by offering a comprehensive assessment of the reform process and its vertical and horizontal redistributive effects. Whilst this project is about Mexico, the results could serve as a reference of the potential impact that similar social policy reforms

can or have had, not only in other Latin American countries, but also in countries outside the region where similar reforms of taxes and benefits have been implemented.

The research will identify the potential effects at a household level of the shift that has been undertaken in Mexican social policy during the past two decades. More specifically, to determine if the reforms implemented across the social protection system have potentially augmented or diminished the levels of support offered by the state to households from different socioeconomic groups, and if such a variation has occurred, then to identify the extent in which those different types of households could have been benefited or affected by the policy changes. The levels of support are operationalised in terms of the disposable income of model families after the payment of taxes and the reception of benefits. The research is based on the hypothetical simulation of taxes and benefits according the established rules in the year prior to the reforms, 1994, and the last year available, 2012. Model families selected for the study are meant to illustrate different population groups and the distribution of taxes and benefits as established by the tax/benefit system's rules.

By covering a period of 18 years, the project will yield a comprehensive evaluation of the reform social policy process and will reveal which have been the socio economic groups on whose welfare the state has put more or less emphasis. Results will exhibit the horizontal and vertical redistributive potential of social policies before and after the reforms, hence illustrating the consequences for different types of families of the policy changes, and revealing if there has been a variation in the population groups prioritised by the state, and if so what has been the extent of such variation.

The main research question that the thesis attempts to answer is the following:

- How did the fiscal and social policy reforms undertaken in Mexico between 1994 and 2012 modify the redistributive potential of the tax/benefit system?

The redistributive potential is operationalised in terms of a family's income after the payment of benefits and the reception of benefits according to the rules set by the policy architecture, especially the eligibility criteria, benefit levels and funding sources of different social programmes. The thesis will estimate disposable cash income after the payment of taxes and the

reception of cash benefits, and final income which also includes the usage of benefits in-kind. The tax/benefit system refers to all direct taxes paid at the national level and the benefits of the major social programmes operated by the federal (national) government, from the main social policy areas, namely pensions, employment benefits, family benefits, healthcare, housing and education. Taxes and benefits are calculated on an annual basis.

Since the purpose is to evaluate the reform process, the study will calculate and compare the effects of the tax/benefit system on family income at two moments in time, before and after the reforms. The moment before the reforms is the year 1994, the first year of the government that started the reform process, and 2012, the year of the last government and the last year available. The research covers the last three governments. In Mexico presidential administrations last six years, with no possibility of re-election. As explained above, before 1994 the development of social policy shows a great stability, based on the gradual expansion of social insurance through the incorporation of new programmes or the extension of coverage.

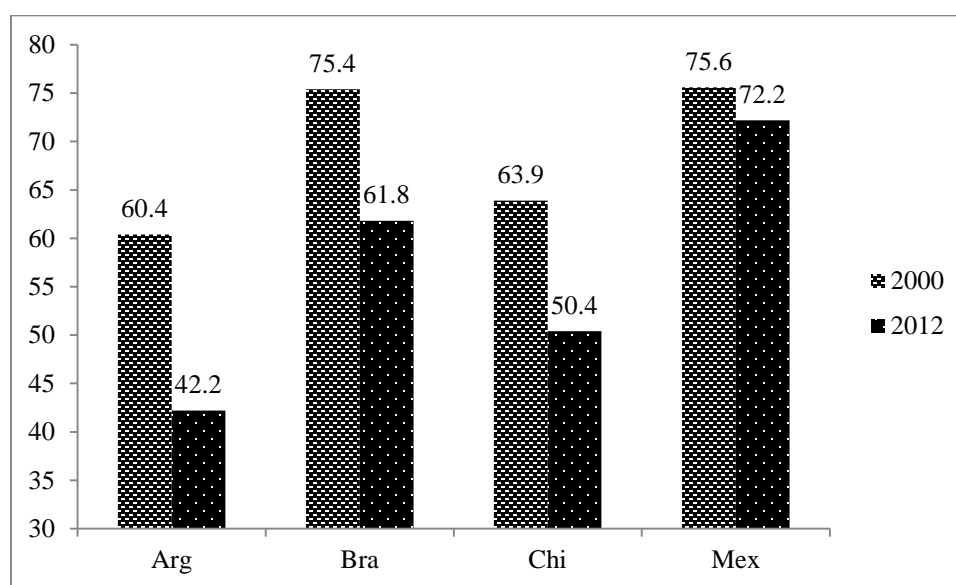
The research will seek to answer three sub-questions:

- How were the changes in the system's rules expected to benefit or affect households from different sectors of the population? In other words, who were the winners and losers of the reforms? Which were the family types most affected or benefited by the reforms?
- How were changes or continuities in the redistributive potential of the tax/benefit system obtained? In other words, what specific changes in the system's rules benefit or affect households from different sectors of the population? Which programmes affected or benefited different family types?
- How can the emerging architecture of the tax/benefit system be characterised? In other words, what are the main features of the country's social protection model that emerged from the reform process?

The thesis then aims to identify the consequences of the social policy reforms at the family level. The data analysis seeks to reveal how the reforms of the tax/benefit system have impacted the welfare of Mexican families, expressed in terms of their income after taxes and benefits, which policy changes have favoured or affected different families and to establish the main features of the welfare model that has emerged in the country after the transformation of social policy.

The research rationale, scope and expected contributions were presented in chapter 1. It was mentioned that contrary to the trend observed in other Latin American countries, poverty and inequality rates in Mexico have remained at extremely high levels. According to the United Nations Development Programme (UNDP), most countries in the region have registered steep decreases in the percentages of poor and vulnerable people during the current century, whilst in Mexico the fall has been of only a few percentage points. These measurements differ from the official poverty measurements published by the national statistics office of Mexico. This thesis is then justified because it is considered that a better understanding of how the social protection system has been functioning is needed to discern the reasons behind the persistent high levels of poverty in the country. The analysis of the architecture of the tax/benefit system is necessary to reveal its failures and achievements and to identify areas of opportunities where the system can be improved to enhance its potential to fight poverty and inequality.

**Figure 7. Poor and Vulnerable Population in Argentina, Brazil, Chile and Mexico (% of Total Population)**



Source: UNDP (2014)

### 4.3. The Method: Model Families

The ‘model families’ method consists on the hypothetical simulation of the redistributive impact of taxes and benefits on family income. The simulation is hypothetical because the effects are



modelled according to the system's rules. The units of analysis on which the effects are calculated, which could in fact be families, households or individuals, are meant to be illustrative of the population, not representative. The method generates a picture of how a tax/benefit system should work following its established rules.

'Model families' has been extensively applied in cross-national comparative studies of social policies in countries with advanced welfare states. It was originally developed in the 1980s to compare family policies, but was later applied to compare other social policy areas (Papadopoulos, 1998, Bradshaw, 1994), like social assistance programmes (Eardly et al., 1996), unemployment benefits (Papadopoulos, 1998) and lone-parenthood policies (Bradshaw et al., 1996). The approach has also recently been applied to compare social protection levels in former Communist states (Bradshaw et al., 2013).

Bradshaw (1994) states that comparative studies of social policies can be classified in four types: 'macro studies of inputs', 'macro outcome studies', 'micro studies of inputs' and 'micro studies of outcomes'. Micro studies of inputs would be aimed at examining particular systems, comparing benefits and services, and answering questions like what benefits and services are available, at what level, how are they delivered, by whom and for whom, and how frequently. 'Model families' would fall under the category of these micro studies of inputs.

Papadopoulos (1998) elaborates more on the objectives, characteristics and possible uses of the method and notes that its primary goal is to study policy outputs. He explains that the application of 'model families' requires first an analysis of the policy environment and the institutional structure at a meso-level, in order to then allow the study of the policy outputs at a micro-level. This author calls the approach 'micro-data simulation technique' (MDST), and defines it as a technique for generating micro-data to analyse the structure and objectives of public policies, more specifically it consists in the simulation of the outputs of a group of policies (i.e. the tax/benefit system), in terms of the benefit packages offered by the government to households, families or individuals. The technique can be used to analyse and compare policy outputs in one or many countries, at one or several moments in time and for one or several household/family/individual type.

As mentioned, the application of ‘model families’ is based on the simulation of the expected effects of the tax/benefit system on different types of families (households or individuals). The impact of the tax benefit/system refers to the amount that a family would be expected to pay in taxes and social security contributions, and to receive in welfare benefits from the state, according to the legislation and rules of a determined country. The precise components of the tax/benefit system that are considered can vary according to the type of study that is undertaken. The precise application of the method can also vary, but by looking at the studies that have used it, its steps can be summarised in the following way:

- The first step of the method is to select the units of analysis, i.e. the group of model families, according to certain criteria that depend on the research topic and objectives.
- Then the current legislation should be reviewed to gather information on the taxes that each model family would have to pay and the benefits and services that would be available also for each model family.
- Data could also be collected about private expenditure associated with welfare services (i.e. education, health and housing).
- A matrix is built with the taxes, benefits and private expenditure that correspond to each model family.
- Finally, the net disposable income for each model family is estimated, taking in to account original gross earnings of each model family, subtracting net taxes that it would have to pay (i.e. income tax and social security contributions subtracting tax deductions), adding the benefits and services each model family would be entitled to, and if necessary depending on the research’s objectives, subtracting the estimates of private welfare spending.

The formula for the application of ‘model families’ or micro-data simulation technique is shown in figure 8.

**Figure 8. The Model Families Formula**

Net Income	=	Gross Earnings	-	( Income tax	-	Deductions )	-	Social insurance contributions	+	Benefits	-	Private Spend- ing
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Source: Own elaboration based on Bradshaw (1994).

The use of the model family approach generates several advantages for the study of tax/benefit systems (Papadopoulos, 1998, Bradshaw, 1994, Van Mechelen et al., 2011):

- It is simple and results are easy to understand.
- It has limited data requirements and does not require survey data where social policy beneficiaries may be underrepresented, where elements of social policy benefit packages can be underreported or not identifiable.
- Maximises the extent in which like is compared with like, by utilising the same unit of analysis: model families or households.
- Allows for an integral approach, with the possibility of comparing the system as a whole and eliminating the problem of not considering the interaction of policies.
- It can be highly transparent and permits the replication of results.
- Can be used as the basis for further policy analysis at a macro-level.

‘Model families’ also has some limitations, that nonetheless can be overcome (Bradshaw, 1994). The method produces a description of how the social policies should work according to their rules, not how they work in reality. In other words, it assumes full compliance with the legislations and a take up rate of 100 per cent; hence, it shows the expected impact of the policies, not their outcome in terms of their final impact (Van Mechelen et al., 2011, Bradshaw, 1994). In a country with the geographical, economic and political conditions and institutional capacity like Mexico, there could be a considerable distance between the system’s rules and how they are applied in terms of access and delivery of benefits. Nonetheless, precisely because of such possible distance, this thesis aims to assess the design of the social protection system. The objective is to quantify the social protection architecture and its potential for redistributing income and tackling poverty and inequality.

Indeed the key aim of the thesis is to assess the redistributive potential of social policy reforms in the form of the outputs that can be produced by the design of the policy architecture. It is not to assess actual outcomes which are produced by the interaction between policy regulations, their implementation and the wider socio-political and economic environment where households operate. In this context, the empirical data of this thesis involves the quantification of tax and social policy rules and legislation expressed in a monetary form. It is not the monetary impact of taxes and benefits on actual income of households which, as mentioned, is also influenced by other socio-political and economic factors as well as individual circumstances and characteristics or even clientelistic practices. This latter exercise is beyond the scope of this thesis.

A second limitation is associated with the inevitable arbitrariness in the selection of the model families, since the more assumptions that are made about them, the less representative of a country's reality they might become. The choices that are made not only about the selection of model families, but also about locality, benefit amounts, housing costs and others, will strongly affect the results. It has been argued that 'model families' fails to take into account the heterogeneity of the population. These arguments are linked to the issue of representativeness. Like it has been stated in a recent report, although the main objective of the technique is to illustrate the operation of tax/benefits systems, it is still worthwhile to make a reference to how representative the simulation is (Van Mechelen et al., 2011). Another way to overcome this limitation is to be as transparent as possible in the presentation of the research design, and in the case of extremely sensitive variables, to present results before and after its application, as Papadopoulos (1998) recommends. This thesis also addresses the issue by attempting to model effects for a wide range of family types.

The third limitation relates to the need of selecting a specific location within a country to conduct the study. In countries with locally determined benefits a specific location has to be chosen to identify the variables for the study (Eardly et al., 1996, Van Mechelen et al., 2011). This is especially relevant for studies of federal countries, like Mexico. This thesis will analyse the output of policies instrumented at a federal level, namely at the national level, but taking earnings and other variables from Mexico City, the largest metropolitan area of the country and the location used to estimate benefit levels of several social programmes.

Van Mechelen et al (2011) also comment that the approach does not capture the entire benefit package that families may have at their disposal, for example production for own consumption, private transfers or in-kind benefits. Regarding the latter, the authors mention that the quantification of services can represent an obstacle in cross-national studies. Nonetheless, this thesis does attempts to overcome such limitation by modelling the effects of three types of services, as described below.

Finally, Van Mechelen et al (2011) warn that results may not be straightforward because of the specific role that social policy arrangements play at different moments and time. For example, in one case social assistance transfers may have a lower amount due to the existence of another type of programme that supplements the families' income. In this thesis this will not be a limitation because the simulation covers programmes from all core social policy areas.

#### **4.4. Research Design**

As commented previously, the model families approach has been previously applied in cross-national studies to estimate levels of income support offered to families of different compositions. In this thesis it is innovatively adapted to compare two moments in time within the same country; and to analyse the redistributive effects across families of different labour market attachment. The latter is especially important for the case of Mexico because of the fragmentation of the social protection system. This section explains the way in which the method will be adapted for this thesis, the indicators that will be used to analyse the data, the criteria taken into account for the selection of model families and the components of the tax/benefit system that will be calculated for the different family types.

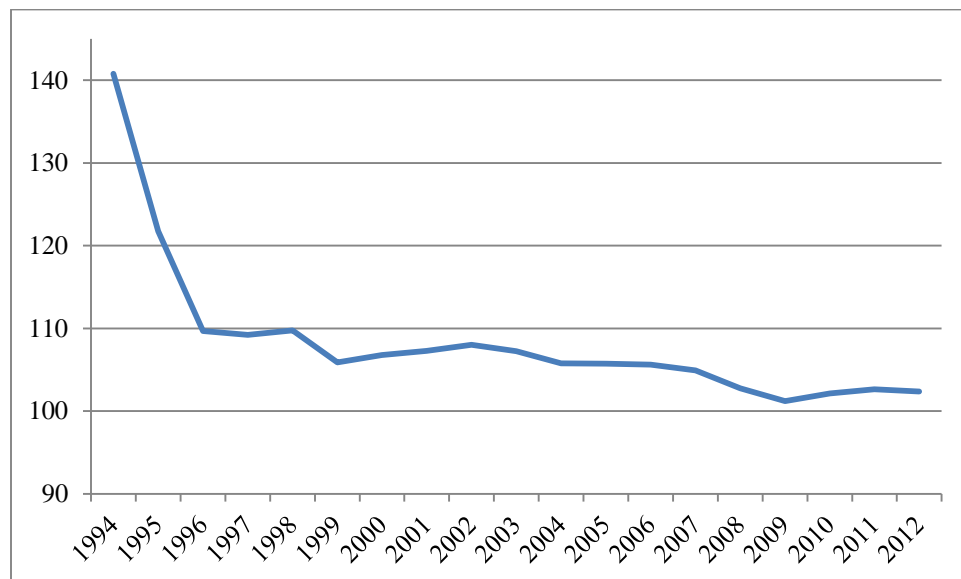
##### **4.4.1. Comparison across Time**

The study analyses the effects of the tax/benefits system's architectures of 1994 and 2012. The Mexican currency is called peso (\$). To make the results comparable, all amounts are expressed in constant pesos of 2012. Figures of 1994 were brought to 2012 applying the inflation index from December 1994 to December 2012 of 5.44, reported by the national statistics office (INEGI, 2014b). In the following chapters all amounts will be shown in British pounds as well.

Mexican pesos were converted to pounds using the Purchasing Power Parity (PPP) rates established by the OECD (OECD, 2014). The PPP rate of 2012 was \$11.33 for one pound.

Real wages in Mexico have been falling for more than 20 years. Figure 9 shows the evolution of the annual average minimum wage for the period 1994-2012, expressed as percentage of the minimum wage of December 2010. As can be observed, in 1994 the average would have represented more than 140 per cent of the average at the end of 2010; after sharp falls in the 1990s, it has continued to decrease and just between 2002 and 2012 it lost close to ten percent of its real value.

**Figure 9. Annual Average Minimum Wage, 1994-2012 (December 2010=100%)**



Source: Own elaboration with data from CONASAMI (2013).

The figure shows the average minimum wage because it varies across the country to reflect differences in the cost of living. In 1994 there were three economic zones with three different amounts, but just in 2012 the zones were reduced to two. Table 7 shows the daily minimum wages per zone for both years, expressed in pesos of 2012. As is explained below, the research will establish income levels of family models in the number of times that original earnings represent of one minimum wage. In both years Mexico City falls in Zone A; therefore the amounts that will be used in the study will be \$83.68 and \$62.33.

**Table 7. Daily Minimum Wages by Economic Zones (2012 pesos/pounds)**

Zone	1994		2012	
	\$	£	\$	£
A	83.68	7.39	62.33	5.50
B	77.19	6.81	59.08	5.21
C	70.12	6.19	----	

Source: Own elaboration with data from the CONASAMI (2013)

The minimum wage in Mexico lost 25.5 per cent of its value between 1994 and 2012. This fall must be taken into account when the results of the research are analysed. Levels of income after taxes and benefits will tend be higher in 1994 just because the initial income was 25.5 per cent higher, although the levels of state support (i.e. the percentage that the value of the tax/benefit package represents of original income) could be higher in 2012.

#### **4.4.2. Criteria for the Selection of Model Families**

The criterion for the selection of model families varies depending on the objectives of the research (Bradshaw et al., 1993, Bradshaw et al., 1996, Eardly et al., 1996). In the case of this thesis, the selection process aims to illustrate the effects of the different components of the tax/benefit system. The eligibility criteria of social programmes and the payment of taxes in Mexico vary with the employment profile of the earner(s), income level and family composition. These are the three dimensions that are applied for the selection of model families.

As previously discussed in this thesis, a high degree of segmentation is the main characteristic of the Mexican labour market and the social protection system mirrors that segmentation (Barba, 2006). In other words, the type of employment of the earner determines the type of social benefits that the family would receive. Hence, the first dimension to be incorporated in the selection process is the employment profile of the family, which is the link that the family has to the labour market defined by the type of employment of its earner(s).

There are four employment profiles than can illustrate the effects of the tax/benefit system. These are the same profiles that were identified in the last sections of chapter 3.

- Waged workers in the formal private sector with them and their employers complying with tax and social insurance regulations.
- Public sector workers, which would automatically comply with tax and social insurance regulations.
- Self-employed (or employers) complying with tax regulations.
- Waged workers, self-employed (or employers) that do not comply with either social insurance or tax regulations, or both.

As stated, families of the first two groups would have access to social insurance and would pay income tax, whilst the households linked to the informal sector could be entitled to social assistance at the same time that only some or no taxes are paid. The differentiation between waged formal private and public sector workers is important because of their different social insurance systems. The objective is to identify levels of redistribution across different segments of the labour market.

Families of earners who are formal salaried workers would pay income tax and social insurance contributions, and would receive social insurance benefits from the IMSS in both years. Families of earners employed in the public sector would also pay income tax and social insurance contributions, and would receive benefits from their own social insurance system, the ISSSTE. Families of self-employed earners complying with income tax would not be covered by the social insurance system, but in 2012 they could be eligible to social assistance benefits. Families of informal workers who would not be complying with income tax and would be covered by social insurance even if in principle some should be for being waged workers, but in 2012 they could be eligible to social assistance. Education is the only universal programme that is not associated to the family's labour market profile.

Pensioners would represent an additional employment profile. In this case, it will be assumed that the retired worker spent his entire career employed under one of the four profiles mentioned above. Hence, a person pensioned by the IMSS system would have worked been employed in the formal private sector throughout their lives, a person pensioned by the ISSSTE system would have done the same in the public sector, and a person eligible for a non-contributory pension would have never been covered by social insurance.



The second dimension for the selection of model families is income level. Taxes and benefits also depend on the family's income level. The amounts that a family pays in taxes and social insurance contributions are based on the earner(s) earnings. Social insurance benefits can also vary according to the workers wage, and more importantly of the study of policy changes in Mexico, the eligibility to social assistance programmes depends on the family's earnings.

In many studies that have applied the model family approach three gross earnings levels before taxes and benefits have been set: average earnings, half average earnings and 1.5 average earnings (Bradshaw et al., 1996, Bradshaw and Tokoro, 2014, Van Lancker and Van Mechelen, 2014). The official data on average earnings in Mexico is the following. The monthly average household income reported in National Income and Expenditure Survey (ENIGH) for 1994, expressed in pesos of 2012, was \$15,080 (£1,331) and in 2012 it was \$12,708 (£1,122). These amounts include all cash income (e.g. income from waged labour, government transfers and migrant remittances) and non-cash income (e.g. gifts and in-kind transfers from other households or individuals). If only cash income is considered, the monthly average household income for 2012 would be \$10,005 (£833), and if only income from waged labour is considered, \$8,428 (£744) (ENIGH, 2012). The mean monthly average wage of employees reported in the 2012 National Occupation and Employment Survey (ENOE) was \$6,193 (£546) (ILO, 2013). The only issue with using any of these figures for the present study is they all represent post-tax income. In fact, all national surveys in Mexico report only post-tax income (Attanasio and Binelli, 2009).

Several studies that have applied the 'model families' approach have set earnings levels at average earnings, 1.5 times average earnings and half average earnings. In an attempt to follow those studies (Bradshaw et al., 1993, Bradshaw and Tokoro, 2014, Eardly et al., 1996). To set levels of gross earnings, one alternative for the present thesis could be to discount the payment of taxes from the averages reported in the national surveys, which as mentioned do not report pre-tax income, and make the calculations for the same three levels as other studies; however, that decision would not reveal the full effects of the tax/benefit system at the bottom of the income scale, where the application of targeting mechanisms can establish the access to benefits at lower levels than half the average income, nor would it reflect the country's high income inequality, where average household income in the 10<sup>th</sup> decile represents 26 times the average of households in the first decile (ENIGH, 2012).

Another alternative would be to set levels of original earnings in times the minimum wage. The minimum wage was established in Mexico since 1917 (CPEUM, 1917); it is widely used in Mexican public administration to set the value of fines, tariffs and similar concepts that are deemed to need updating with wage levels (CONASAMI, 2013). The minimum wage is defined as the minimum daily amount that a worker can receive for his services (LFTSE, 1963), before the payment of taxes or the reception of government transfers. Specifically for social policy, the minimum wage is used in the social insurance legislation to establish contributions and benefits levels. When the legislation makes reference to the insured worker's wage expressed in times the minimum wage, it considers the gross wage before payment of any taxes (LSS, 1997). Hence, setting income levels in times the minimum wage in the present study would avoid the obstacle of not having average pre-tax gross earnings in government surveys.

Setting levels of original earnings in times the minimum wage will also be useful to reflect a wider income spectrum, in accordance to the country's high income inequality, it would be useful to reveal the effects of targeting mechanisms at the bottom of the income scale, and it would reveal the levels of support offered by the state to workers who earn the minimum legal. The minimum wage as a starting point to calculate the effects of taxes and benefits has also been used in studies of advanced welfare states (Marx and Nelson, 2013).

The levels of average earnings expressed in times the minimum wage would be the following. The average household income for 1994 would represent 6.1 times the minimum wage of that year, and for 2012 6.7 times. The average household cash income of 2012 would represent 5.2 times the minimum wage and the average from waged labour 4.5 times. The mean wage would represent 3.3 times.

The decision taken will be to establish levels of original earnings in times the minimum wage, as follows:

- One to five times the minimum wage. One is the legal minimum that a waged worker can be paid, five would be close to the average in both years and the levels in between will reveal the effects of targeting mechanisms.
- 10 times the minimum wage, because it represents the maximum at which some social insurance contributions and benefits for private sector employees were set in 1994 and

the maximum at which contributions and benefits are set in both years for public sector workers.

- 15 and 20 times the minimum wage, to identify the effects of taxes and benefits for high income families.
- 25 times the minimum wage, because it represents the maximum at which social insurance contributions and some benefits are set for private sector employees.

The third dimension for the selection of family types is family composition. This dimension refers to the number and age and of household members, to identify the levels of support that the state offers to different type of families. Bradshaw (Bradshaw, 1994) comments that family models should be illustrative, not representative of a population. In the case of this thesis, the selection process was carried out with the aim of illustrating the effects of the various components of the tax/benefit system. The assumptions considered for the selection of family compositions were the following.

On the side of taxes, the rules for the payment of income tax nor social insurance contributions do not differentiate between different types of families, so workers would pay the same amounts regardless of having economic dependents or not. The only component for which family composition matters is for Popular Health Insurance, because families with young children would be exempted from paying them up to a higher income level than childless couples or families with older children.

On the side of benefits, composition is important because family benefits, namely maternity leave and childcare, only cover insured women in work, and pensioners could receive a complement if have had economic dependents. On the side of social assistance benefits, family composition is relevant for estimating the effects of conditional cash transfers, which depend on the number and school level of children, and childcare services, to which women in work would be eligible to.

The system does not consider any special provisions for dual earner families. Income tax and social insurance contributions are calculated and paid on an individual basis, as well as social insurance benefits. Popular Health Insurance contributions and social assistance benefits can

vary depending on the family's income and structure, but the rules do not differentiate between single and dual earner families. Hence, no dual earner family types are included in the research.

Considering then the characteristics of social programmes, the following family types were selected:

- A couple with one male earner, one newly born child and one child in primary school, which is referred to as the 'standard family' through the rest of thesis.
- A couple with one male earner and four children: one newly born, one in primary school, one in secondary school and one in high school.
- A childless couple with one male earner.
- A lone parent family headed by a female earner with one newly born child and one in primary school.
- A one person household of a pensioner 70 years old.

In sum, the process for the selection of the model households will be the following:

1. The first dimension to be applied will be the four employment profiles, plus the cases of pensioners previously employed under the conditions of the four employment profiles.
2. Each employment profile group will be divided in nine income levels expressed in times the minimum wage.
3. Employment profiles and income levels will be divided by four family compositions. An additional composition will be the pensioner's household.

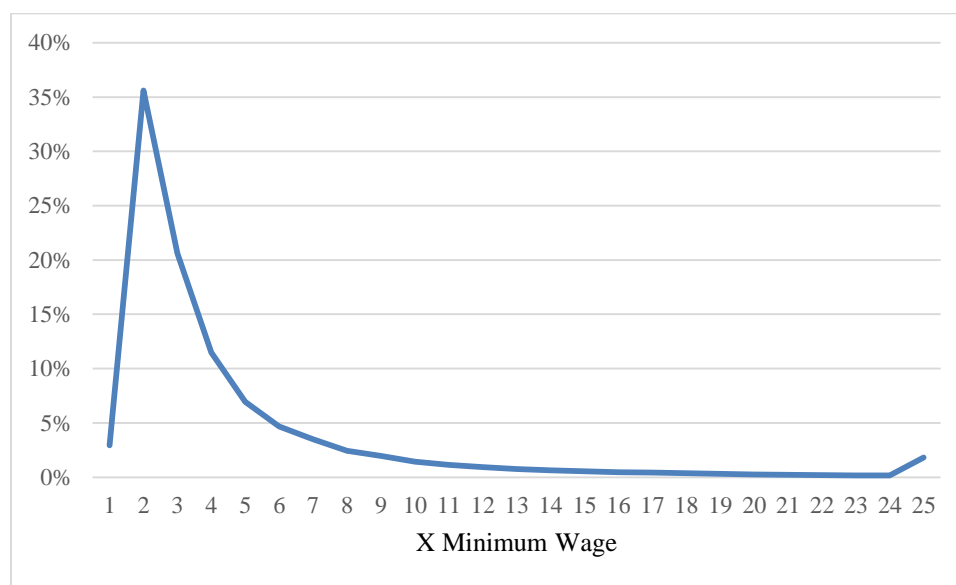
Considering all the possible combinations, taxes and benefits will be calculated for a total of 144 family models plus 45 pensioner household types. Because of space limitations, the results presented in the following chapters will be based on the calculations for the standard family at three levels of original earnings: one minimum wage, five and 25 times the minimum wage. However, reference to the results of other model families will be made when necessary to illustrate the effects of the tax/benefit system.

As previously commented, under the 'model families' approach the family types selected are meant to be illustrative of the whole population, not representative; however, it is still relevant to address the issue of representativeness, like it has been done elsewhere (Van Mechelen et al.,

2011). Section 3.5 described the Mexican labour market and the rates of social insurance coverage. This study will cover all labour market status except the unemployed, however the unemployment rate in Mexico has been historically low, hardly surpassing five per cent of the labour force (WB, 2013). In addition the inclusion of the unemployed will not illustrate any relevant changes in the tax/benefit system. So the five labour market status identified to choose the family types would represent all households in the country.

The nine income levels would also represent a wide spectrum of the population. Like mentioned, income inequality in Mexico is very high, with a large proportion of workers earning wages below the mean. Figure 10 shows the wage distribution for workers in the formal private sector expressed in times the minimum wage, from one to 25. Almost 60 per cent of workers earn less than the average wage of 3.3 minimum wages (ILO, 2013) and almost 80 per cent have earnings equivalent to five times the minimum wage or less. At the other end, 1.8 per cent of workers earn 25 times the minimum wage or more.

**Figure 10. Wage Distribution, 2012 (% of Workers in X the Minimum Wage)**



Source: IMSS (2013b).

Household earnings are only slightly less skewed because of the presence of more than one earner. The proportion of households in 2012 with an income from waged labour below the average of 4.5 times the minimum wage is 48 per cent and the proportion with earnings below

five times the minimum wage is 59 per cent (ENIGH, 2012). By including income levels from one to five times the minimum wage, this thesis will identify the support offered to the majority of families in the country, with the higher income levels as the reference for who much those that support compares to the support offered to upper income families.

On family composition, as already mentioned, 25 per cent of households are headed by a female and 75 per cent by a male. One-person households represent nine per cent of the total. By number of members, the highest proportion corresponds to households of four member, 23 per cent, whilst households of 6 or more members represent 17 per cent. The following section describes some general assumptions that apply to all calculations.

#### **4.4.3. General Assumptions**

This section describes the general assumptions that will apply to the data analysis process. Specific assumptions made about the calculation of each component of the tax/benefits system are detailed in the corresponding section of the next three chapters. The study compares the effects of the system throughout 1994 and 2012. The first general assumption to consider is that taxes, benefits and expenditures will be estimated on an annual basis. The taxes that should be paid and the benefit that should be received in each year will be added up for each model family. By calculating taxes and benefits annually, instead of monthly, it will be possible to simulate of the effects of benefits like sickness or maternity leave, which may cover more than one month.

It is assumed that family types meet all eligibility criteria for the social programmes that correspond to their employment profile and income level. The same is assumed for the conditions to remain in programmes like targeted family cash transfers (i.e. the *Oportunidades* programme).

The value of benefits in-kind will be quantified using figures of average per capita spending. The three types of benefits in-kind are included in the study: healthcare, child care and education. In the case of healthcare, the figure that will be used is the annual amount spent in each segment of the system - namely IMSS services for public sector workers, ISSSTE for public sector workers and services for families with no social insurance – divided by the number registered users. The value of childcare will be estimated dividing annual spending figures by the number of registered

children. In the case of education, the figure that will be used is the average spending per student reported by the Secretariat for Education.

It will be assumed that all families make the same use of services regardless of their income level, except for education. Two situations for education will be calculated. Private education is frequent among high income groups, although in total, only 10 per cent of all Mexican children attend private schools. To reflect this trend, it will be assumed that high income families do not enrol their children in public schools and pay a tuition fee of a private school. In the case of healthcare spending, in spite of the large coverage percentages of the public healthcare programmes reported by the government, private spending represents around half of the total spending on healthcare in the country. To reflect this trend, it will be assumed that all families incur in private spending on healthcare services. These assumptions are important because these private spending concepts can be deduced from income tax.

In the case of social insurance contributions, only the employee's share is calculated, as this would be the amount contributed by the family. Employer's and state contributions are not calculated. This assumption applies to contributions paid to the housing institutions that fund mortgage loans for formal sector employees.

In the case of pensioners it will be assumed that the person spent his/her entire working life under the same employment profile, as already commented, and earning the same salary in times the minimum wage. This assumption is important for the calculation of social insurance pensions, which depends on the number of years that persons contributed to the system and their wage levels

The study includes only families with employed earners; the unemployed are not considered. The unemployment rate of Mexico is low compared to other countries; at the end of 2012 the rate was 4.4 per cent of the total working age population, and historically only in rare occasions has it surpassed five per cent (INEGI, 2013). On the other side, the informal sector is very large. Employment protection is provided through severance payments mandated by the labour legislation and no income support programme for the unemployed had ever been implemented at the national level up to 2012. Given the low unemployment rate and the absence of social programmes, the situation of the unemployed will not be analysed.

Levels of redistribution are estimated at two different moments. The first one refers to ‘disposable income’, namely the cash income of family types after the payment of taxes and the reception of cash benefits. The second moment is referred to as ‘final income’, namely the virtual income that would result from adding the value of benefits in-kind to disposable income. The effects of housing programmes will be estimated after final income, because they large amount could distort the results.

Two basic indicators will be used to estimate changes in levels of redistribution and state support. The first one is disposable or final income expressed as a percentage of original earnings for each family type. The second indicator is disposable or final income of 2012 expressed as a percentage of disposable or final income of 1994. Additional indicators that are used to illustrate the effects of policy changes are described in the corresponding section.

#### **4.5. The Mexican Tax/Benefit System**

This section wraps-up the first part of the thesis by presenting the components of the tax/benefits system as they will be calculated in the thesis for each employment profile. Considering the policy architectures sketched in chapter 3 and the research design discussed in the present chapter, table 8 compares the components of the tax/benefit system by employment profile of 1994 and 2012. Taxes and benefits are presented as they would be subtracted from or added to original earnings following the ‘model families’ formula. Social insurance contributions are presented before income tax because that is how they are applied in Mexico. As mentioned, social insurance contributions will only include the employee’s share. Private spending on welfare services should be added to disposable income at the end, especially to estimate the effects of tax deductions.



**Table 8. The Tax/Benefit System by Employment Profiles in 1994 and 2012**

Formal Private Sector Employees		Public Sector Workers		Self-employed formal sector		Informal workers (employed or self-employed)	
1994	2012	1994	2012	1994	2012	1994	2012
Gross Earnings	Gross Earnings	Gross Earnings	Gross Earnings	Gross Earnings	Gross Earnings	Gross Earnings	Gross Earnings
( - )	( - )	( - )	( - )	( - )	( - )		( - )
IMSS contributions	IMSS contributions	ISSSTE contributions	ISSSTE contributions	Income Tax	Health Insurance		Health Insurance
( - )	( - )	( - )	( - )	( + )	( - )		
Income Tax	Income Tax	Income Tax	Income Tax	Deductions -Healthcare	Income Tax		
( + )	( + )	( + )	( + )		( + )		
Deductions -Healthcare	Deductions -Healthcare -Education -Mortgage Interests -Pension	Deductions -Healthcare	Deductions -Healthcare -Education -Mortgage Interests -Pension		Deductions -Healthcare -Education -Mortgage Interests -Pension		
( + )	( + )	( + )	( + )		( + )		( + )
Cash Benefits -Incapacity benefits -Maternity benefits -Pensions	Cash Benefits -Incapacity benefits -Maternity benefits -Pensions	Cash Benefits -Incapacity benefits -Maternity benefits -Pensions	Cash Benefits -Incapacity benefits -Maternity benefits -Pensions		Cash Benefits -Family transfers -Old age pensions		Cash Benefits -Family transfers -Old age pensions
Disposable income	Disposable income	Disposable income	Disposable income	Disposable income	Disposable income	Disposable income	Disposable income
( + )	( + )	( + )	( + )	( + )	( + )	( + )	( + )
Benefits in-kind -Healthcare -Childcare -Education	Benefits in-kind -Healthcare -Childcare -Education	Benefits in-kind -Healthcare -Childcare -Education	Benefits in-kind -Healthcare -Childcare -Education	Benefits in-kind -Healthcare -Education	Benefits in-kind -Healthcare -Childcare -Education	Benefits in-kind -Healthcare -Education	Benefits in-kind -Healthcare -Childcare -Education
Final income	Final income	Final income	Final income	Final income	Final income	Final income	Final income
( + )	( + )	( + )	( + )		( + )		( + )
Housing mortgage loans	Housing mortgage loans	Housing mortgage loans	Housing mortgage loans		Housing subsidies		Housing subsidies

Source: Own elaboration.

## 4.6. Concluding Remarks

This chapter described the research objectives, the method that will be used to achieve them, and the assumptions that will be made for its application. The method that will be applied to answer the research questions is ‘model families’, used extensively in studies of comparative social policy. It consists on the hypothetical simulation of the effects of taxes and benefits on different family types. The effects of taxes and benefits are simulated according to system’s rules. The method serves the purpose of this thesis, which is to reveal the variations in the levels of state support offered to different population groups as a result of changes in the social protection architecture of the country.

One advantage of model families is that it offers certain degree of flexibility. Hence, it is possible to adapt it for the comparison of two moments in time within the same country, as it is used in this thesis. The chapter concluded by specifying some general assumptions that should be considered for the adaptation of the method. The next three chapters present the results of the data analysis.

## 5. Effects of Changes in Taxes and Contributions

### 5.1. Introduction

This chapter presents the analysis of the potential effects of changes in the components of the tax system:

- Social insurance contributions, with two separate systems; the IMSS system for private sector employees ruled by the Social Insurance Law (LSS) and the ISSSTE system for public sector employees ruled by the ISSSTE Law (LISSSTE).
- Income tax ruled by the Income Tax Law (LISR) and including personal income tax for wage earners and corporate income tax for the self-employed; in the case of the latter two additional set of rules would apply, the Single Rate Business Tax (IETU) ruled by its own law, the LIETU, and the Minor Taxpayers Regime (REPECOS) considered in the LISR.
- Popular Health Insurance (SPS) contributions which fund healthcare for families with no social insurance, ruled by the General Health Law (LGS) and its operation rules published annually.

The main indicator used for the analysis is disposable income expressed as a percentage of original income for each model household. Results are shown by employment status and income level. Regarding household composition, findings presented here are based on the calculations for a households made up of a couple with a male earner and two children. Tax and contribution rules in Mexico apply on an individual basis and do not differentiate among household compositions, hence the same effects would apply to all compositions. The only case where composition matters is Popular Health Insurance, hence in that case calculations for other household models are discussed.

The effects of the different taxes and contributions are discussed in the order in which they apply according to the system's rules. The following section of the chapter presents the effects of social insurance contributions, which would apply first because they are netted out of taxable income. The third section discusses the effects of changes in income tax rules, including the introduction of IETU and the REPECOS during the last decade. The fourth section centres on the effects of the introduction of Popular Health Insurance on households eligible to this programme, namely

those with earners not covered by social insurance either because they are self-employed or they work in the informal economy. Each of these sub-sections is divided in three parts: the first part describes the changes in the rules and contribution and tax rates, the second one specifies the assumptions made for the calculations and the third one discusses the potential effects on the disposable income of model households. The sixth section compares the combined effects of all the system's components and identifies the model households that would be most benefited or affected by the combination of changes. Finally, some concluding remarks are offered.

## **5.2. Social Insurance Contributions**

Social insurance covers households with earners who are formal sector employees. There are two systems, the IMSS system for private sector employees and the ISSSTE system for public sector employees. Both systems are funded by tripartite contributions from the state, employers (which in the case of the ISSSTE system are the state secretariats or ministries) and workers. This study includes the calculations of workers' contributions; since they represent the amount that employees contribute from their own wage to fund the benefits they receive from the system. Contributions amounts were calculated following the rules specified in the legislation: the 1973 Social Insurance Law applicable in 1994, the 1997 Social Insurance Law applicable in 2012, the 1982 ISSSTE Law applicable in 1994 and the 2007 ISSSTE Law applicable in 2012.

### **5.2.1. IMSS: Private sector employees**

#### **5.2.1.1. IMSS contributions structure**

The Mexican Social Insurance Institute (IMSS) covers waged workers in the private sector. Its services are funded by tripartite contributions. The 1997 reform replaced the Social Insurance Law of 1973, one of the main changes was the modification of the contributions structure. Under the old law, workers contributed to two insurance branches with a total of 5.25 per cent of their wage. The reform introduced the following changes:

- The Sickness and Maternity branch was separated into three sub-branches, one to fund healthcare services, another one for cash benefits and the third one to fund healthcare for

pensioners. The total rate for these concepts was reduced from 3.125 per cent of the wage to 0.91 per cent on average.

- A progressive formula for the Healthcare sub-branch was introduced. The rate was established at 0.4 per cent of the difference between the workers wage and three minimum wages and exempting all workers earning three times the minimum wage or less.
- The Disability, Old-Age and Death branch was separated in two branches, one called Disability and Life and another one Retirement and Old-Age, and the total rates for these concepts was reduced from 2.1 to 1.8 per cent of the worker's wage.
- The cap of 10 minimum wages that existed for the calculation of the Disability, Death and Old-Age contributions was eliminated; after 1997 all contributions were capped at 25 times the minimum wage.

Contribution rates before and after the reform are compared in table 9. One important aspect that was kept was that workers earning the minimum wage were exempted from paying all contributions.

**Table 9. IMSS Workers' Contribution Structures, 1994/2012**

1994		2012	
Insurance Branches	Rate (% of wage)	Insurance Branches	Rate (%of wage)
Sickness and Maternity	3.125	Sickness and Maternity	0.91
		Healthcare <sup>1/</sup>	0.28
		Cash benefits	0.25
		Healthcare for pensioners	0.375
Disability, Death and Old Age	2.125	Disability and Life	0.625
		Retirement and Old Age	1.125
Total	5.250	Total	2.655

Source: LSS (1973), LSS (1997).

1/ Contributions for Healthcare are calculated at 0.4 per cent of the difference between the worker's wage and 3 minimum wages; workers earning less than 3 minimum wages are exempted. The percentage shown in the table is the average paid in 2012.

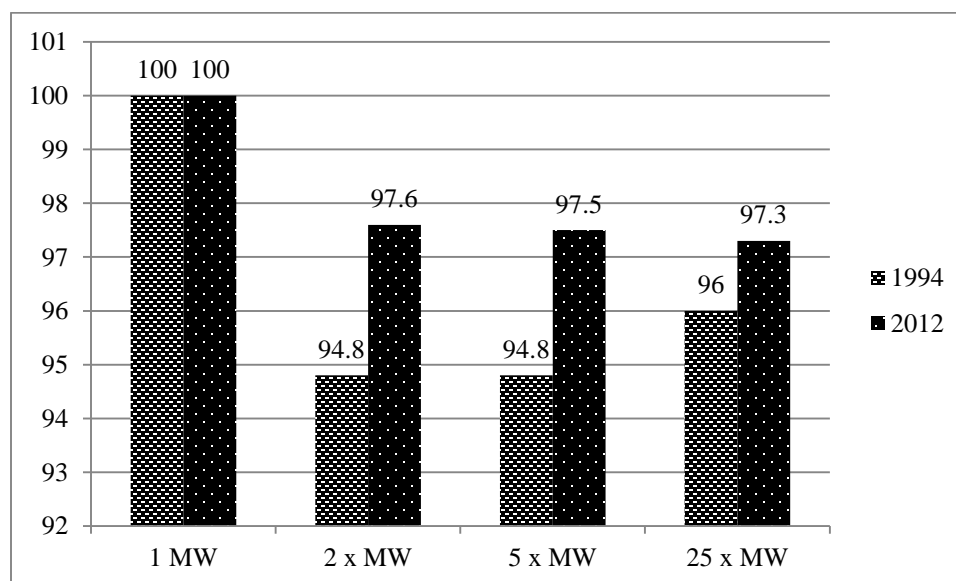
### 5.2.1.2. Assumptions for the calculations of IMSS contributions

It was assumed that worker's employment status did not change and that all workers remained in the same income level throughout the whole year.

### 5.2.1.3. Effects of IMSS contributions

In 1994 the same rates applied to all workers except those with earnings of one minimum wage, because they were exempted, and those earning the equivalent of 10 minimum wages or more, because of the cap on the Disability, Death and Old Age branch. The 1997 reform introduced a more differentiated structure. Figure 10 compares the 1994 and 2012 disposable income after social insurance contributions for four income levels. At the lowest income level, disposable income represents 100 per cent of the original in both years because they would be exempted in both years. For the rest of the households the reform would have resulted in higher percentages of disposable income.

**Figure 11. Disposable Income after IMSS Contributions, Formal Sector Employees, 1994 and 2012 (% of Original Earnings)**



Source: Own calculations.

For families earning two and five times the minimum wage, the reform would have represented and increase in their disposable income from 94.8 per cent of the original to 97.6 and 97.5 per cent respectively. At the highest income level, in 1994 a household would have registered a

disposable income of 96 per cent, higher than at two and five minimum wages since they would be paying less contributions due to the cap of 10 times the minimum wage on one of the insurance branches; in 2012 disposable income would increase to 97.3 per cent, slightly below the other two household types.

By reducing contribution rates, the social insurance reform of 1994, would have had a positive effect on the disposable income of all households. Interestingly, in 1994 high earnings households would have been contributing to the system with lower percentages. This situation was corrected by eliminating the cap on one of the branches and by the reform's intention of making the structure progressive, with contribution rates rising with income level. Nonetheless, the differences of only decimal points could not be considered significant.

## **5.2.2. ISSSTE: Public sector workers**

### **5.2.2.1. ISSSTE contributions structure**

The State's Workers Social Security and Services Institute covers all federal civil servants and a large percentage of state and municipal workers. In 2007 a new ISSSTE Law was enacted which replaced the Law passed in 1982. Like the IMSS reform, the reform included a new contribution structure, but contrary to that one, rates were increased and set at higher percentages. The changes that the reform introduced in workers' contributions were the following:

- Two contribution branches were eliminated: contributions to fund personal loans and the contribution for 'administrative expenses'. Personal loans as a benefit offered by the ISSSTE were kept, but the new legislation established that they should be self-funded, by the interests paid on previous loans.
- A special branch within the new Healthcare branch amounting to 0.625 per cent of wage was introduced to fund the healthcare services of pensioners.
- The previous branch that funded all pensions was separated into two new branches: Disability and Life and Retirement and Old-Age, with an increase in the rate from 3.5 per cent of wage to 6.75 per cent.

An aspect that was preserved was the cap of 10 minimum wages on the wage used to calculate the payment of contributions. The contribution structures of 1994 and 2012 can be observed in

table 10. In total, workers' contributions share was raised from 8 per cent of wage to 10.63 per cent.

**Table 10. ISSSTE Workers' Contribution Structure, 1994 and 2012 (% of Wage)**

1994		2012	
Insurance Branches	Rate (% of wage)	Insurance Branches	Rate (%of wage)
Healthcare	2.75	Healthcare	
		Healthcare for active workers	2.75
		Healthcare for pensioners	0.625
Pensions	3.5	Disability and Life	0.625
		Retirement and Old Age	6.125
Social services	0.5	Social Services	0.5
Loans	0.5		
Administrative expenses	0.75		
Total	8.00	Total	10.625

Source: LISSSTE (1983), LISSSTE (2007).

#### **5.2.2.2. Assumptions for the calculation of ISSSTE contributions**

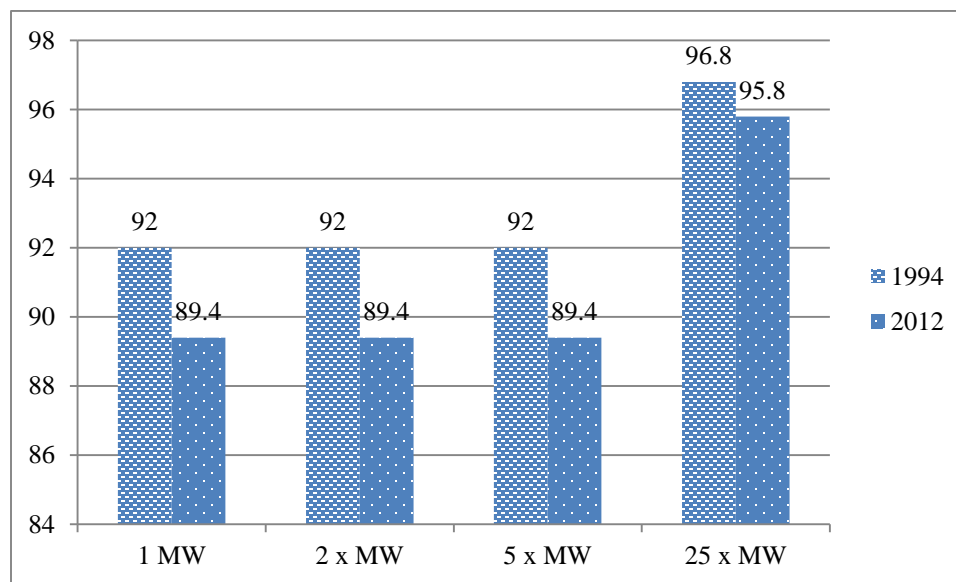
It was assumed that worker's employment status did not change and that all workers remained in the same income level throughout the whole year.

#### **5.2.2.3. Effects of ISSSTE contributions**

Figure 11 compares the potential effects of ISSSTE contributions changes. Disposable income would be expected to drop for all model households because of the rise in contributions. In 1994 disposable income for the first three income levels represented 92 per cent of the original, compared to 89.4 in 2012. The highest proportions of disposable income would be registered for the top income households, because of the cap on the payment of contributions.



**Figure 12. Disposable Income after ISSSTE Contributions, Public Sector Employees, 1994 and 2012 (% of Original Earnings)**



Source: Own calculations.

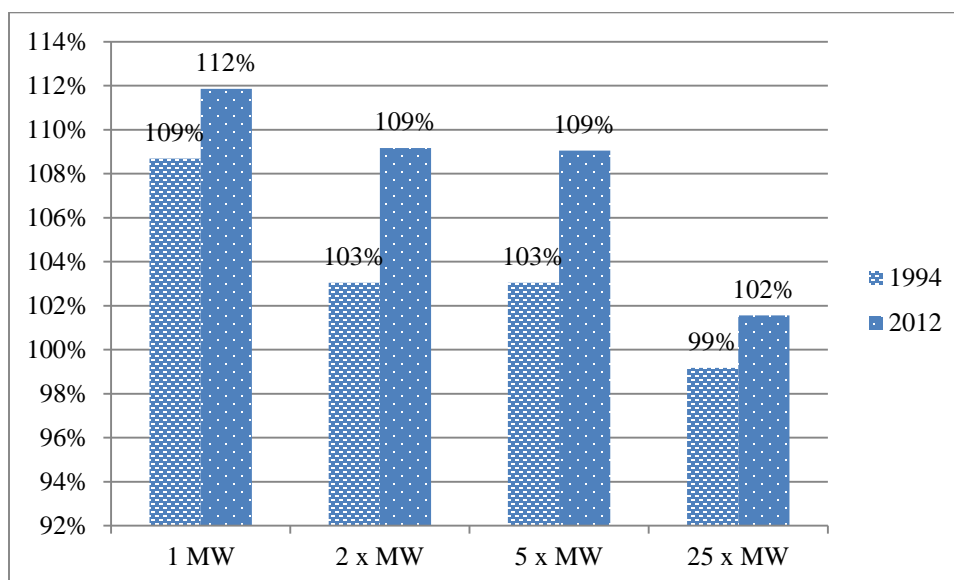
### 5.2.3. Comparison of Changes in IMSS and ISSSTE Contributions

Contrary to households with earners employed in the private sector, households with earners who are public sector employees were negatively affected by the reforms. In 1994 public sector workers were already contributing with larger percentages of their earnings to fund their social insurance benefits, but the reform widened the difference.

Figure 12 compares the amount of ISSSTE contributions as a percentage of IMSS contributions in 1994 and 2012. For the lowest income level, public sector workers are not exempted from paying contributions like workers employed in the private sector; in 1994 the amount that a household of a public sector employee would have been contributing represented 109 per cent of the amount contributed by a household of a private sector employee, but by 2012 the proportion would be expected to rise to 112 per cent. It is at this lowest level that the gap is the widest because private sector workers would be exempted from social insurance contributions. For the next two income levels, in 1994 contributions of both systems were set almost at the same level, but by 2012 ISSSTE contributions represented 109 per cent of IMSS contributions. The most similar levels of contributions in both years are registered for households with earnings of 25

times the minimum wage, because of the cap on 10 times the minimum wage preserved for ISSSTE contributions, which compensates for the increase of rates.

**Figure 13. ISSSTE Contributions as a Percentage of IMSS Contributions, Public Sector Employees, 1994 and 2012**



Source: Own calculations.

ISSSTE beneficiaries were paying higher rates in 1994 than IMSS beneficiaries because arguably their benefit levels were also higher. The reforms widened that gap. In 2012, the state was asking public sector workers to contribute with significant larger percentages of their wages to fund their social insurance benefits. The next section of the present chapter discusses the potential effects of changes in income tax rules.

### 5.3. Income Tax

Income tax reforms began much earlier than social policy reforms. The Income Tax Law (LISR) in force in 1994 was originally enacted in 1980, but significant changes had already been introduced by 2012. For example, the marginal rate for the top income bracket had been reduced from 60 to 35 per cent (Elizondo, 1994).

Income tax rules apply on an individual basis to all people subject of paying it regardless of household composition. Households that would pay income tax be those with waged earners who

are employed in the formal sector, whether in the private or public sectors, and households with earners who are self-employed and follow the rules that oblige them to pay taxes, plus, only in 2012, pensioners with a pension equivalent to 15 times the minimum wage or more.

Table 11 lays out the tax schedules for 1994 and 2012. The 1994 schedule includes the modifications introduced in 1991, which consisted of a subsidy of a 50 per cent discount on the marginal tax rate for the first five brackets, decreasing discounts on the rates of the next levels, reductions of the fixed fees of all ranges, and the addition of three brackets at the top of the income scale.

**Table 11. Income Tax Schedules, 1994 and 2012**

1994					2012				
Lower Bound	Upper Bound	Fixed Fee		Marginal Tax Rate	Lower Bound	Upper Bound	Fixed Fee		Marginal Tax Rate
(x MW)	(x MW)	x MW	\$2012		(x MW)	(x MW)	x MW	\$2012	
0.0	0.3	0.0	-	1.50	0.0	0.3	0.0	0.0	1.92
0.3	2.3	0.0	122	5.00	0.3	2.2	0.0	114	6.40
2.3	4.0	0.1	3,157	8.50	2.2	3.9	0.1	2,967	10.88
4.0	4.6	0.3	7,586	12.50	3.9	4.5	0.3	7,131	16.00
4.6	5.6	0.3	10,042	16.00	4.5	5.4	0.4	9,439	17.92
5.6	11.2	0.5	14,479	19.80	5.4	11.0	0.6	13,087	21.36
11.2	17.7	1.2	37,071	23.80	11.0	17.3	1.8	39,929	23.52
17.7	22.4	1.9	57,019	28.00	17.3	---	3.2	73,703	30.00
22.4	26.9	2.2	67,092	31.50					
26.9	---	2.4	71,843	35.00					

Sources: LISR (1981), LISR (2002).

The 2002 reform reduced the number of income brackets and brought down the top rate from 35 to 28 per cent, although by 2012 it had been raised two percentage points to 30 per cent. The number of income brackets was initially reduced to six, but later augmented back to eight. There are certain rules that apply only to waged earners or to the self-employed. Among waged earners,

no distinction is made between private and public sector employees. The first part of this section discusses the effects on households with waged earners and the second part the effects on households with self-employed earners.

### **5.3.1. Income tax for waged earners**

#### **5.3.1.1. Tax structure for waged earners**

The rules described in this section apply to all individuals that have a formal subordinated employment relationship with an employer. This would also be the group subject of coverage by the social insurance system, either the IMSS for private sector workers or the ISSSTE for public sector employees. Low income waged workers are entitled to a subsidy on income tax, introduced in 1993. The subsidy is discounted from the amount that should be paid for income tax, and if the subsidy's amount is higher than the amount calculated for income tax, the worker receives the exceeding amount as a benefit from the employer, and the employer later deducts the amount from his corporate income tax. In practice, the subsidy represents a cash transfer for poor workers. Table 12 compares the subsidies applicable during 1994 and 2012. In 1994 all workers received the subsidy, although the amounts decreased and became not very significant as income increased. With the introduction of the new LISR, subsidies were limited to workers earning less than four minimum wages. Amounts were slightly higher in 2012 except for the lowest bracket.

**Table 12. Income Tax Subsidies for Waged Workers, 1994 and 2012**

1994				2012			
Lower Bound (x MW)	Upper Bound (x MW)	Subsidy		Lower Bound (x MW)	Upper Bound (x MW)	Subsidy	
		x MW	\$2012			x MW	\$2012
0.0	1.4	0.16	4,909	0.0	0.9	0.22	4,884
1.4	1.9	0.15	4,613	0.9	1.4	0.22	4,882
1.9	2.4	0.13	3,923	1.4	1.9	0.22	4,879
2.4	2.9	0.12	3,603	1.9	1.9	0.21	4,713
2.9	3.4	0.11	3,312	1.9	2.4	0.20	4,590
3.4	3.8	0.10	2,993	2.4	2.5	0.19	4,251
3.8	---	0.10	2,906	2.5	2.9	0.17	3,898
				2.9	3.3	0.16	3,536
				3.3	3.8	0.14	3,042
				3.8	3.9	0.12	2,611
				3.9	---	0	0

Source: LISR (2002), LISR (1981)

The legislation permits deductions on income tax of several concepts associated to the purchasing of private welfare services and benefits. The amounts spent are discounted from taxable income. Taxpayers can deduce the amount spent for themselves and their economic dependents. With the reforms the number of these concepts has been increased. Table 13 lists the concepts that were allowed in 1994 and 2012. In comparison to the first year, in 2012 taxpayers could additionally deduce the purchasing of private health insurance, the payment of mortgage loan interests, voluntary contributions to private and pension funds and the payment of private school fees from pre-school to high school, but not of childcare.

**Table 13. Deductible Concepts from Personal Income Tax, 1994 and 2012**

Concept	1994	2012
Medical expenses	Yes	Yes
Private health insurance	No	Yes
Funeral expenses	Yes	Yes
Mortgage loan interests	No	Yes
Voluntary contributions to public pension funds	Yes	Yes
Voluntary contributions to private pension funds	No	Yes
Private school fees	No	Yes

Source: LISR (2002), LISR (1981)

All expenses are deductible at 100 per cent from taxable income (LISR, 2002), with the exception of private school fees, which are capped at the equivalent of the average cost of a child in the public education system (SHCP, 2011), and mortgage loan interests, which use a formula based on investment units, a currency used for financial transactions (LISR, 2002).

#### **5.3.1.2. Assumptions for the calculations of income tax for waged earners**

The following assumptions were made for the calculation of income tax:

- The rules described in this section were applied to households with earners assumed to be private or public sector employees.
- Taxable income was taken from the income after social insurance contributions minus deductions.
- Workers' income and employment status remained the same throughout the year.
- Household composition consisted of a couple and two children, one newly born and one in primary school, but the results would be the same for other compositions.
- Deductions of private healthcare expenses were calculated using the national annual average per capita spending taken from the national income and expenditure surveys (ENIGH, 2012). In 1994 per capita private spending amounted to \$908 in 2012 pesos (£80 in PPP) and in 2012 to \$686 (£61 in PPP).

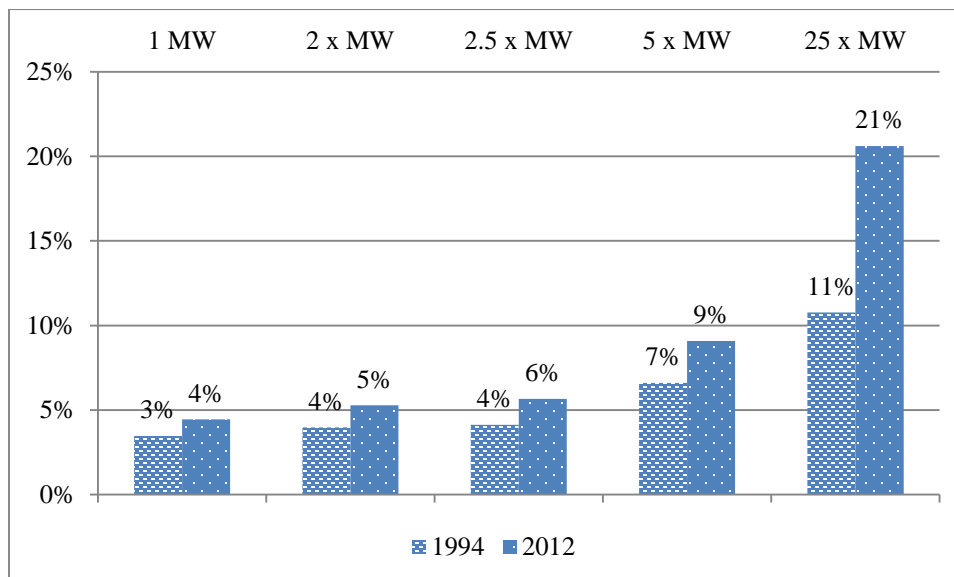
- Since 90 per cent of children in Mexico attend public schools, deductions of private school fees were only calculated for the highest income levels above 15 times the minimum wage, which would correspond to the tenth income decile. The annual amount applied for both years was \$12,900 per child (£1,139 in PPP), reported as the average private school fees in Mexico City in a report published by the national teacher's union (SNTE, 2013). Same amount was used for both years because no data was found for 1994.
- No data was found on the ENIGH or other sources on voluntary contributions to pension plans, so that concept was not included in the calculations. Amounts deducted from spending on mortgage loans interests are incorporated to the calculations and discussed in chapter 7, where the specific section on housing is presented.

#### **5.3.1.3. Effects of income tax for waged earners**

The first part of the analysis highlights the importance of tax subsidies as a benefit for low income families. Figures 13 and 14 compare income tax amounts as percentages of original earnings, before and after the application of tax subsidies, for households with earners employed in the private sector at five income levels. As can be observed in the first graph, if subsidies are excluded all families end up paying higher amounts in 2012 than in 1994. The difference between the two years increased with income level. Hence, the highest increase would be registered for households earning 25 times the minimum wage, for which income tax would represent 21 per cent of original earnings in 2012, almost the double than in 1994.

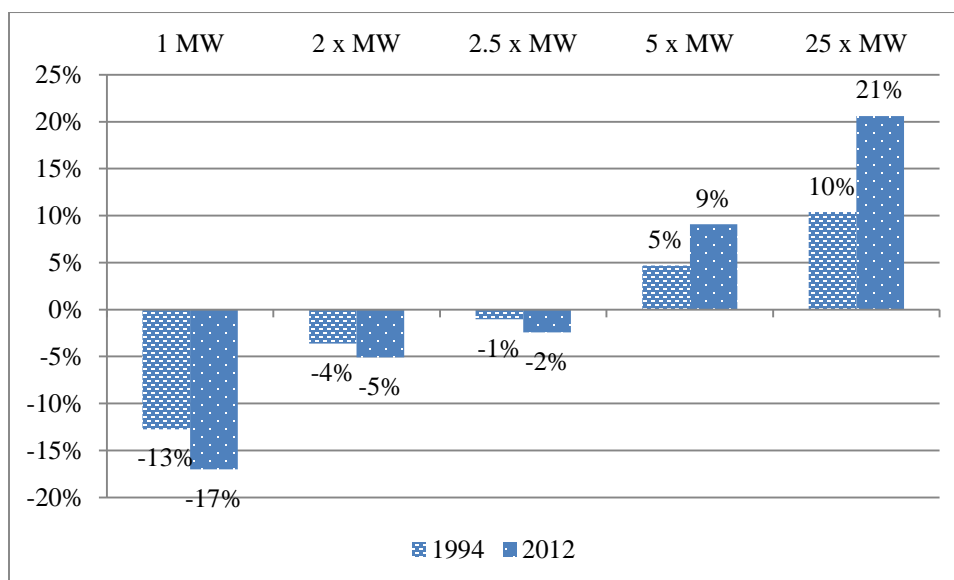
The second figure illustrates how subsidies benefit low income households. The percentages of the first three income levels shown are negative because these families would be paying a negative income tax, that is, their subsidy would be greater than the amount initially calculated which means they would receive the exceeding amount as a cash transfer. Subsidies make the tax rate negative until an earnings level of 2.5 times the minimum wage. Subsidies are also higher in 2012 than in 1994. For households at the lowest income level, the subsidy would be expected to increase from 13 per cent in 1994 to 17 per cent of their original earnings in 2012, at twice the minimum wage subsidies increase from four to five per cent and at 2.5 times the minimum wage from one to two per cent.

**Figure 14. Income Tax as a Percentage of Original Earnings before Subsidies, Private Sector Employees, 1994 and 2012**



Source: Own calculations.

**Figure 15. Income Tax as a Percentage of Original Earnings after Subsidies, Private Sector Employees, 1994 and 2012**

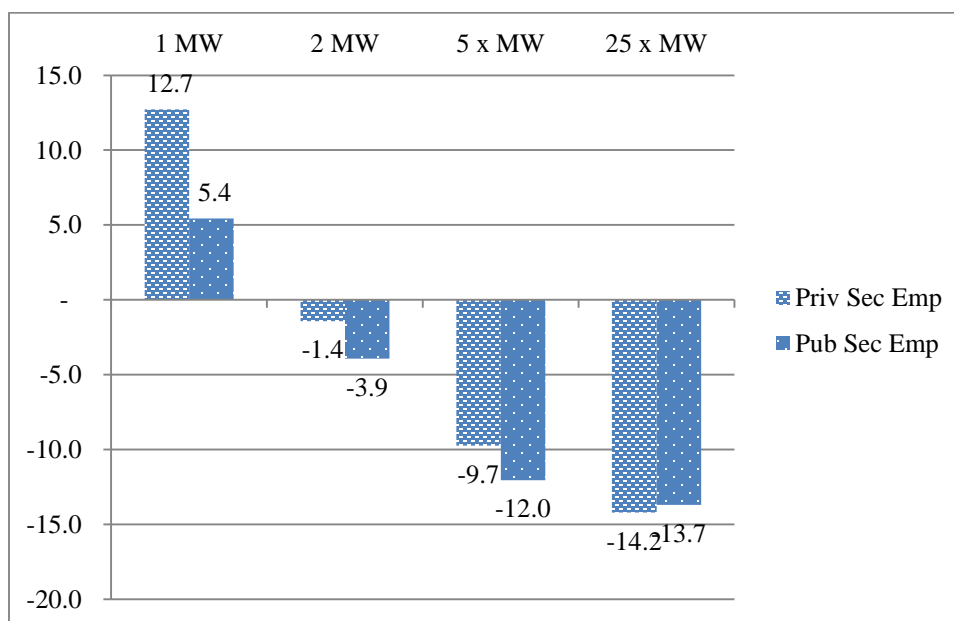


Source: Own calculations.



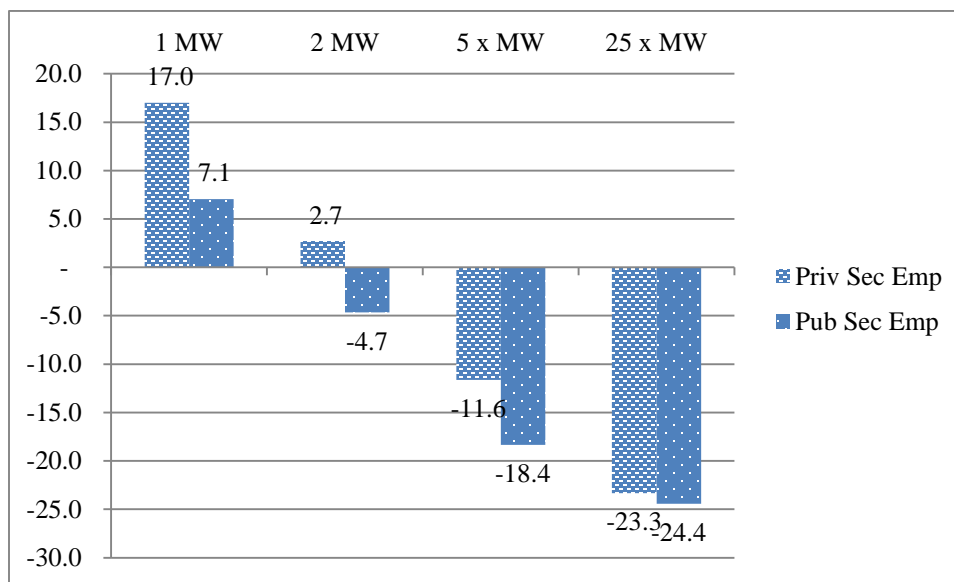
The combined effect of social insurance contributions and income tax changes would have had a positive effect on low income families and negative on middle and high income families, and they would have benefited more (or affected less) families of private sector employees than public sector employees. Figures 15 and 16 compare 1994 and 2012 disposable income after the payment of social insurance contributions and income tax, for households with earners employed in the private and public sectors. In 1994 disposable income of the family of a private sector employee earning one minimum wage represented 12.7 per cent more than its original earnings and 5.4 per cent more for the family of a public sector employee. In other words, contributions and tax rules would actually raise the income for these families above the original income. At the other extreme, disposable income in 1994 would drop 14.2 per cent for families of private sector employees earning 25 times the minimum wage and 13.7 per cent for families of public sector employees.

**Figure 16. Variation between Disposable Income after Contributions and Taxes and Original Earnings, Formal Sector Employees, 1994 (percentage)**



Source: Own calculations.

**Figure 17. Variation between Disposable Income after Contributions and Taxes and Original Earnings, Formal Sector Employees, 2012 (percentage)**



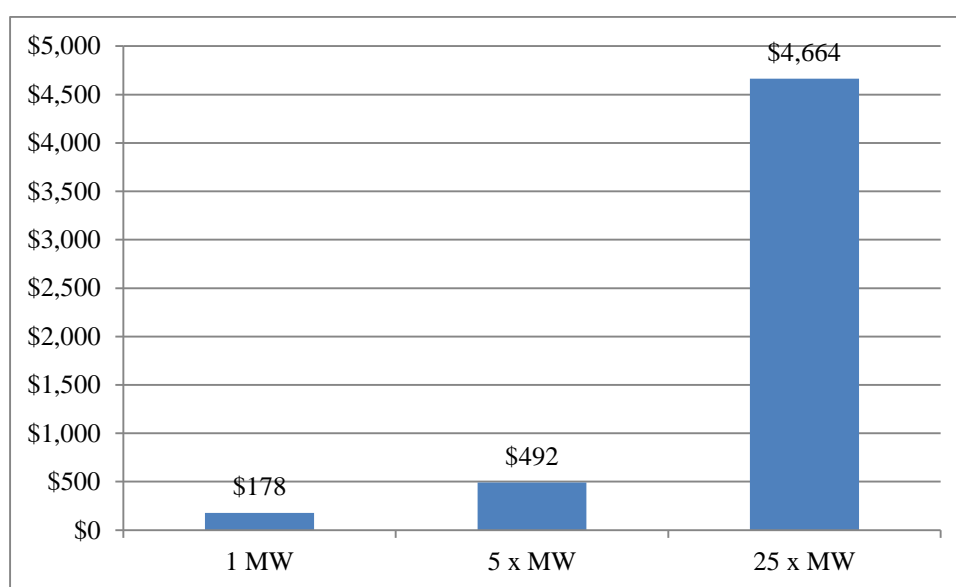
Source: Own calculations.

The figures show that for families with original earnings of up to twice the minimum wage, disposable income in 2012 was higher than in 1994; whilst the opposite happened for families of five and 25 times the minimum wage. Low income families benefited from higher tax subsidies; middle and high income families would have been mostly affected by higher income tax rates. In fact, in 2012 income tax subsidies would be sufficient to raise income above the original for households of private sector employees earning twice the minimum wage too, meaning that these families would be receiving a cash benefit from the state that the others would not.

Families of private sector employees show higher disposable income than families of public sector employees at all income levels because of social insurance contributions. Indeed, whilst the IMSS reform established the reduction of rates, the ISSSTE reform raised them considerably. Hence, the main winners of contributions and tax changes appear to be low income families, but especially those with earners employed in the private sector. At the other extreme, high income families would be the main losers. These results suggest that for these employment statuses, the reforms did make the system more progressive.

One point that is worth adding is the possible effect of income tax deductions. The results shown above include deductions of private healthcare and education expenses. Figure 17 compares the impact that the application of deductions would have on income tax. As can be observed, a family with original earnings of one minimum wage would only obtain an annual reduction of \$178 (£16 at PPP), but a family at the top end of the income scale would obtain a reduction of \$4,644 (£412 at PPP). These numbers were calculated applying the same expenditure levels for all families, but in fact high income families spend much higher amounts on these concepts and obtain significantly higher reductions, especially considering that the tax reforms increased the number of concepts that could be deducted.

**Figure 18. Annual Amounts of Deductions from Income Tax, Private Sector Employees, 2012 (pesos)**



Source: Own Calculations.

The increase in the deductible concepts within the income tax law would represent a regressive measure in the country's income tax structure. Whilst the changes in fees and rates made the system more progressive, the incorporation of additional deductible concepts would tend to benefit households at the top of the income scale. There would be two consequences of these changes. First, they incentivise the opting out of public systems by middle and high income families and a subsidy to private providers of welfare services. Secondly, deducted amounts

would constitute a substantial benefit that the state would be offering to those households that in some cases could surpass the cash benefits provided to poor families.

### **5.3.2. Income Tax for Pensioners**

Pensioners were exempted from paying income tax until 2012. A reform introduced in that year established the payment of income tax on pensions, but only for those of amounts equivalent to 15 times the minimum wage or more. The same tax schedule displayed in table 3.3 above would apply. A pensioner earning 15 times the minimum wage would fall in the seventh bracket, so her marginal rate would be of 23.5 per cent. The effects of the application of income tax on pensions is discussed in the next chapter, when the calculations of pensions are presented.

### **5.3.3. Income Tax for the Self-employed**

#### **5.3.3.1. Tax structure for the self-employed**

The self-employed are treated by the system as individuals with business activities. This group would include people who work independently, like small business owners, independent professionals or workers under outsourced professional contracts with firms<sup>9</sup>. These groups of workers and their families would not be covered by the social insurance system because the legislation explicitly excludes them. In principle, the same tax schedule presented in table 11 would apply to them, including deductions of private spending on welfare services but without the tax subsidies that only apply to waged earners. (LISR, 2002). However, in 2012 two additional sets of rules would distinguish the treatment self-employed workers get:

- After 2007, all the self-employed should pay an additional tax called the single rate tax for businesses (IETU),
- After 2002, an important share of the self-employed could be eligible for the minor taxpayers' regime (REPECOS).

The IETU consists of a flat rate tax applicable to all businesses and individuals with business activities. The rate in effect in 2012 was 17.5 per cent. Income Tax is deductible from the IETU,

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<sup>9</sup> This workers in principle are independent, in reality are under a subordinate relationship but without the benefits of workers employed by firms, like social insurance (Negrete Prieto, 2012) .

so the taxpayer only ends up paying whichever is higher between the two. Expenses related to business activities are deductible; but regarding spending on private welfare services, only contributions to private pension plans can be deducted (LIETU, 2007).

The REPECOS was part of the 2002 new income tax law. Not all the self-employed are eligible. The legislation establishes that only people whose activities are the sale of goods or the provision of services directly to the public up to a certain income threshold can join. Instead of paying the IETU and income tax, people registered as minor taxpayers pay a fee that replaces both taxes, depending on their earnings level, with no deductions allowed. (SHCP, 2008). The fees are different in each state; Table 14 shows the Federal District's fees valid in 2012.

**Table 14. Minor Taxpayers Regime Fees in Federal District (Mexico City), 2012**

Lower Bound	Upper Bound	Fixed Fee	
		\$	£ (PPP)
0.0	0.4	200	18
0.4	0.7	300	26
0.7	0.9	500	44
0.9	1.3	1,000	88
1.3	1.8	1,500	132
1.8	2.2	2,000	177
2.2	4.4	3,500	309
4.4	6.6	7,500	662
6.6	8.8	10,500	927
8.8	11.0	13,500	1,192
11.0	13.2	19,000	1,678
13.2	---	35,000	3,090

Source: Secretariat of Finance, Federal District (GDF, 2012)

The rules of the minor taxpayers' regime establish that only individuals selling goods or providing services directly to the public are eligible for the minor taxpayers' regime. This means that not all independent workers can be accepted. More specifically, the interpretation of the rules means that only independent workers who do not give receipts that are tax deductible can be classified as minor taxpayers. The regime would then basically apply to small shop or workshop owners. Professionals who are under outsourced contracts with firms will not be accepted because they do not provide a service directly to the public, whilst independent professionals who may be providing services to the public would be excluded too because their receipts are tax deductible (SHCP, 2012).

#### **5.3.3.2. Assumptions for the calculations of taxes for the self-employed**

The following assumptions were made for the calculations of income tax for households with self-employed earners:

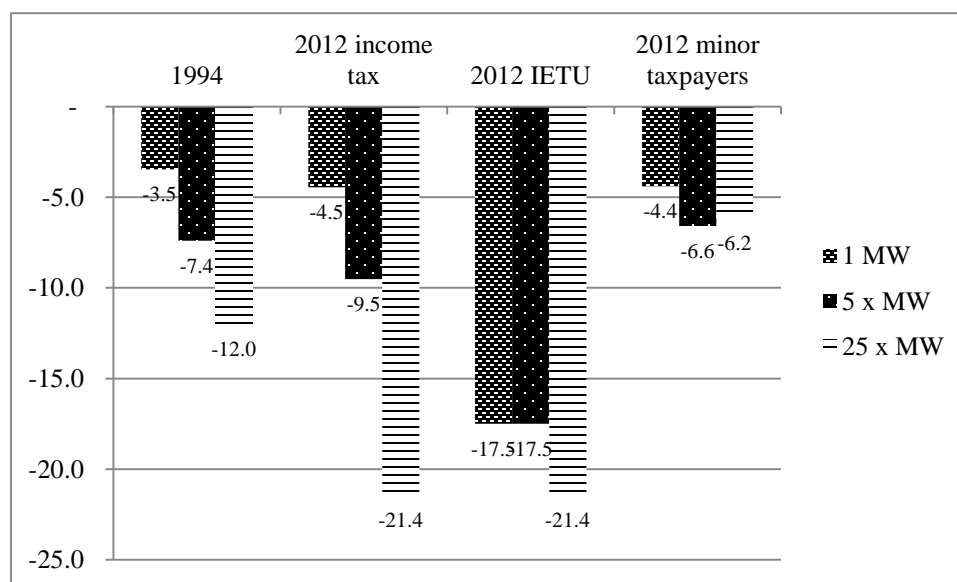
- Household earners were self-employed complying with all the income tax rules.
- None of these households would be paying social insurance contributions because the legislation excludes them from compulsory affiliation.
- Employment status and income level remained the same throughout the year.
- Household composition consisted of a couple and two children, one in primary school; the results would be the same for other compositions.
- The same assumptions on private welfare spending previously made for households with waged earners were made for these households models.
- No deductions associated to business activities were considered.

#### **5.3.3.3. Effects of income taxes for the self-employed**

Changes on the tax structure would have contrasting effects depending if the earner was eligible for the minor taxpayers' regime or not. Figure 18 compares the percentage of variation in disposable income after the payment of contributions and taxes in 1994 and in 2012. Three different calculations are displayed for 2012: after subtracting only income tax (ISR), after income tax and the single rate tax (IETU), and after applying the rules of the minor taxpayers' regime. As can be observed, if only income tax was applied in 2012, disposable income would

be lower than in 1994 for all earnings levels, but much lower at 25 times the minimum wage, reflecting a more progressive structure in the income tax schedule. Nonetheless, the effects change significantly when the other two taxes are added.

**Figure 19. Variation between Disposable Income after Contributions and Taxes and Original Earnings, Self-employed, 3 Income Tax Scenarios, 1994 and 2012 (percentage)**



Source: Own calculations.

The IETU is highly regressive and it would be especially unfavourable to low and middle income households. For the affected households the application of the single rate of 17.5 per cent results in a higher amount than the amount of income tax, so they would end up paying the former instead of the latter. For families with original earnings equivalent to one minimum wage, this would represent a reduction of 14 percentage points in their disposable income compared to 1994, whilst for families with earnings of five times the minimum wage, of close to 10 percentage points. At the top income level, income tax would be higher than the IETU so they would pay the former.

For low and middle income workers that were eligible to the minor taxpayers' regime, disposable income would remain at similar levels compared to 1994; low income workers would

have to pay slightly more, but high income families would result to be greatly benefited. At original earnings of one minimum wage, households would actually be paying more in 2012 than in 1994, from 3.5 to 4.4 per cent of their original income; at five times the minimum wage slightly less, from 7.4 to 6.6 per cent; but at 25 times the minimum wage, the amount paid would be cut in half, from 12 to 6.2 per cent.

The tax changes affected groups of households with self-employed earners in different ways. In the case of households with earners who were able to be classified as minor taxpayers, the new regime was greatly beneficial, as long as they belonged to middle and high income groups. In the case of households with earners that do not meet the requirements to join the minor taxpayers' regime, the IETU would strongly affect the disposable income of the low and middle income ones, cancelling the progressivity of the tax changes observable for households with waged earners. In any case, it seems that low income families with self-employed earners appear to come out as losers of the reforms.

## **5.4. Popular Health Insurance (SPS) Contributions**

Popular Health Insurance was introduced in 2002 to provide healthcare services to families with no social insurance coverage. As explained before, workers are excluded from the social insurance system either because the legislation does not mandate their insurance, as in the case of the self-employed, or because they or their employers avoid the payment of contributions. The beneficiary families of SPS would be those with earners who are self-employed but pay income tax and those with earners in the informal economy that pay no income tax or social insurance contributions, even if they may be legally entitled to social insurance for being employed by someone else.

### **5.4.1. SPS contributions structure**

The design of SPS attempts to emulate the tripartite structure of social insurance contributions. One share corresponds to contributions by the affiliated families; another share to state governments, which act as the employer; and a third share to the federal government. Contributions vary by income decile. A socio-economic survey is carried out for each family that applies to join the programme to estimate its income and identify the decile where it belongs and



the fee that it would have to pay. Table 15 presents the annual contribution amounts for the year 2012. Same amounts apply to all families disregarding of the number or age of their members, but persons who join individually, with not even one family member, pay 50 per cent of the family contribution that corresponds to their income level. When the programme was created, families belonging to the first two deciles were exempted from paying contributions, but in 2010 the exemption was extended to families in the third and fourth deciles.

**Table 15. Popular Health Insurance Annual Contributions, 2012**

Decile	Annual Contribution		Decile	Annual Contribution	
	\$	£		\$	£
<b>I</b>	-	-	<b>VI</b>	<b>2,834</b>	<b>250</b>
<b>II</b>	-	-	<b>VII</b>	<b>3,648</b>	<b>322</b>
<b>III</b>	-	-	<b>VIII</b>	<b>5,650</b>	<b>499</b>
<b>IV</b>	-	-	<b>IX</b>	<b>7,519</b>	<b>664</b>
<b>V</b>	<b>2,075</b>	<b>183</b>	<b>X</b>	<b>11,379</b>	<b>1,005</b>

Source: CNPSS (2011).

Two complementary programmes to SPS were introduced in 2006. The first one called Health Insurance for a New Generation offered the same healthcare services that SPS already provided plus some additional ones specifically directed at children, but exempting from the payment of contributions families up to the seventh income decile with children born after December of 2006. The second one called Healthy Pregnancy also exempted from contributions families up to the seventh decile but which had a pregnant woman as one of their members. The three schemes came to be called the Health Social Protection System, which in practice was just Popular Health Insurance with additional exemptions for families with young children and pregnant women up to the seventh decile.

### 5.4.2. Assumptions for the calculation of SPS contributions

The following assumptions were made for the calculation of Popular Health Insurance contributions:

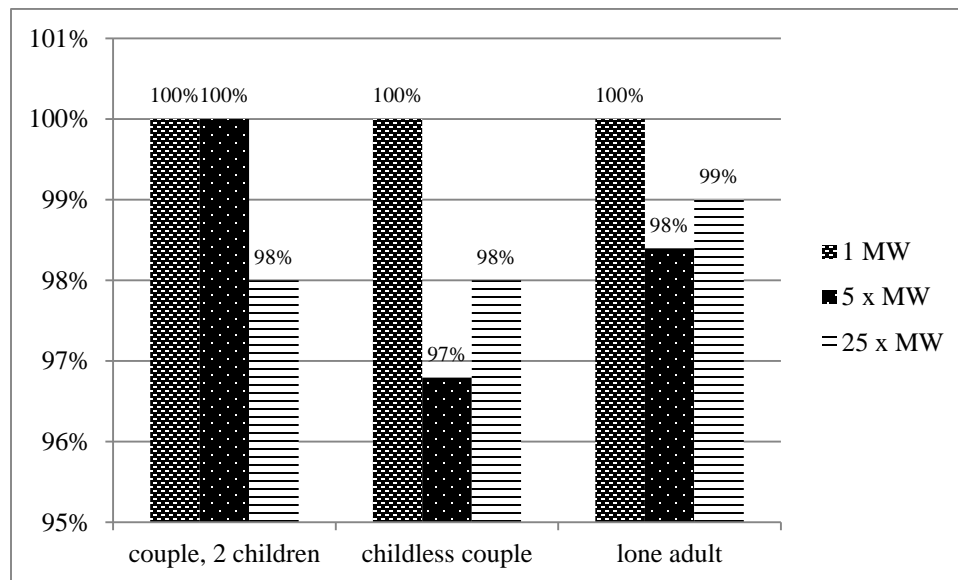
- Because the survey that is applied to each family to identify its income decile is meant to establish available cash income, for families of self-employed earners, it was assumed that the income that the survey would reflect income after income tax.
- For families of earners employed in the informal economy, the income used to determine the payment of contributions corresponded to the original income since the earner would not be paying any taxes.
- Employment status and income level remained the same throughout the year.

### 5.4.3. Effects of SPS contributions

To illustrate the different potential effects of SPS contributions, this section presents the results of the calculations for three household compositions: a couple with two children, one of them being less than six years old; a couple with no children; and a lone person. Figure 19 compares disposable income expressed as a percentage of the original in 2012 for three family compositions with earners employed in the informal economy. In 1994 these families would not have been paying any taxes or contributions, so disposable income would have represented 100 per cent for all of them, but in 2012 some of them would be paying contributions to SPS to fund their healthcare services.

In 2012 couples with young children would be exempted from paying SPS contributions up to an earnings level of five times the minimum wage; a couple with no children would have to pay contributions at five times the minimum wage, and in fact it would be the household contributing with the largest share of its original earnings; and a lone person would not be exempted at five times the minimum wage, but because he/she would pay only half of the contributions, its disposable income would be higher than the childless couple at that level and higher than the other two compositions at 25 times the minimum wage.

**Figure 20. Disposable Income after SPS Contributions, Informal Sector Workers, 2012 (% of Original Earnings)**



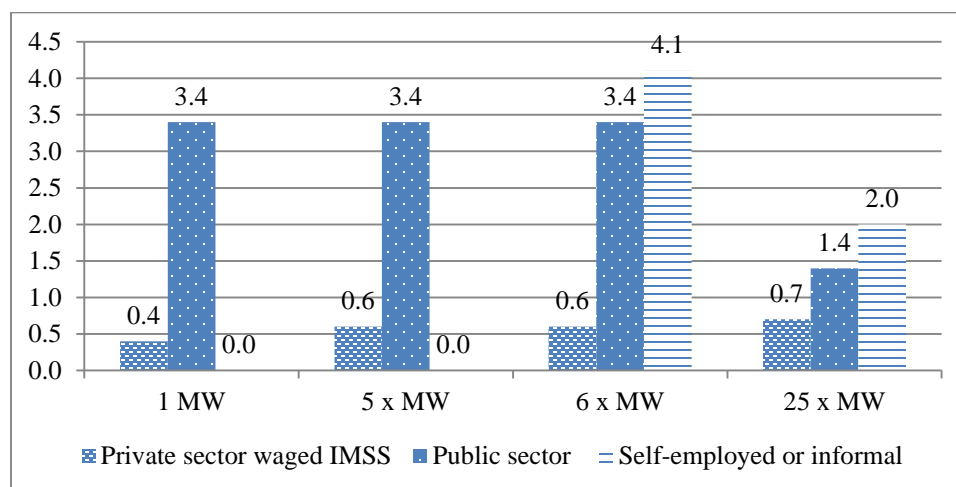
Source: Own calculations.

Two points can be highlighted from the calculation of SPS contributions. First, that proportionally high-income families would actually be contribute less to the scheme than middle-income families if the latter do not have young children. The second point is that of all the household types, lone persons would be the ones contributing the least since they would only be paying half the contributions than other ones. This means that the contributions structure is not entirely progressive and that does not necessarily offers the support families with children might require.

Another interesting analysis would be to compare the amounts that families with no social insurance coverage and families covered by the social insurance system were contributing to fund their healthcare services in 2012. Figure 20 shows the percentages that SPS contributions represent of original income and compares them with the same proportions that waged workers in the formal economy pay to fund social insurance healthcare. As can be observed, households with earnings up to five times the minimum wage would be exempted from paying SPS contributions, but when the exemptions cease, contributions are higher than the amounts that waged private sectors workers would pay. The differences between employment profiles would

be less at the top earnings level, but still SPS beneficiaries would be contributing with higher percentages.

**Figure 21. Healthcare Contributions as Percentages of Original Earnings, 4 Employment Profiles, 2012**



Source: Own calculations.

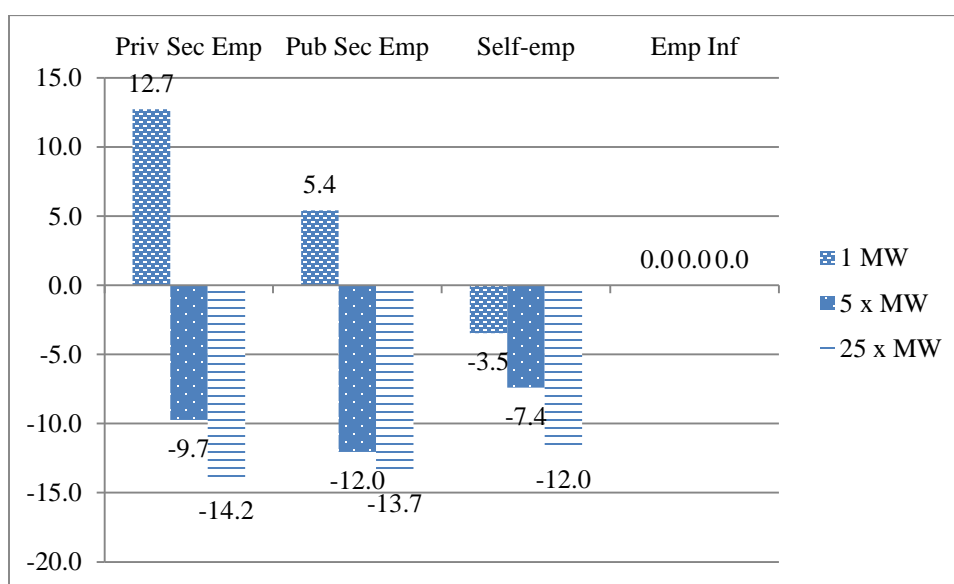
To summarise this section, SPS contributions would decrease disposable incomes for households that in 1994 were not contributing to fund healthcare services. In return they would receive benefits that they were not previously receiving, of which the effects are discussed in the next chapters. The effects vary with income level and household composition. Levels of support in the form of exemptions concentrate on families with children up to five times the minimum wage. Among the households paying contributions, those at the top to the income scale would actually be less affected because of the method of determining contributions by decile. They would also have to do it at higher levels than social insurance beneficiaries. The next section compares disposable income after contributions and taxes for all employment statuses.

## 5.5. Accumulated Effects of the Tax System

When comparing disposable income after contributions and taxes in 1994 and 2012, low income waged workers appear to be the main beneficiaries of the reforms, whilst high income workers of

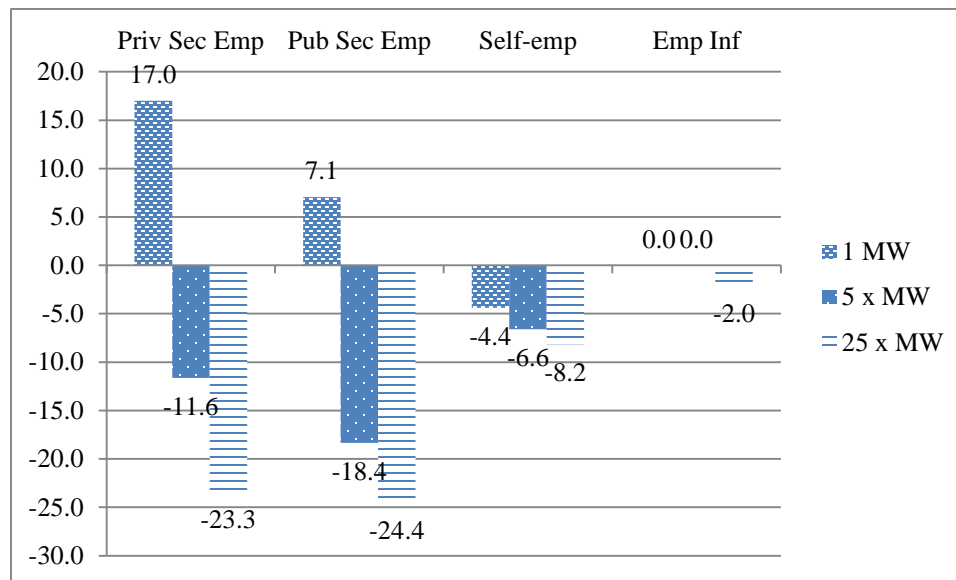
the same employment profiles result to be the most affected. Figures 21 and 22 compare variations in disposable income as a percentage of the original after discounting all taxes and contributions applicable to each household type. The household composition is the couple with two young children. In the case of households of self-employed earners, the indicator shown in the 2012 graph correspond to earners who in that year would have been eligible for the minor taxpayers' regime.

**Figure 22. Variation between Disposable Income after Taxes and Contributions and Original Earnings, 4 Employment Profiles, 1994 (percentage)**



Source: Own calculations.

**Figure 23. Variation between Disposable Income after Taxes and Contributions and Original Earnings, 4 Employment Profiles, 2012 (percentage)**

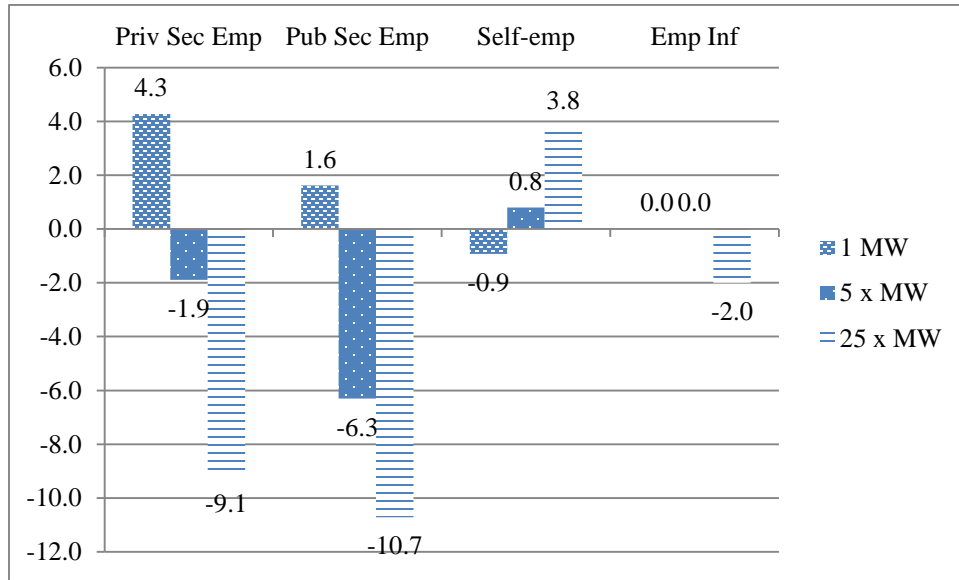


Source: Own calculations.

In 1994 households of private sector employees obtained an income of 17 per cent above original income, and by 2012 the effects of lower social insurance contributions and higher tax subsidies would result raise it to 17 per cent more than the original. These would be the household that was most benefited by the system in both years. Among low income households, those with self-employed earners would not be entitled to tax subsidies, hence in 2012 it would be contributing with 4.4 per cent of its original earnings. At the other extreme, the household type that was paying more into the system did change. In 1994 it was the top income household of a private sector employee which was contributing with 14.2 of its original earnings, but by 2012, as a result of higher social insurance contributions, it was the top income household of a public sector worker the one that was contributing the most with 24.4 per cent.

To better illustrate the winners and losers of the reforms, figure 23 displays the differences in disposable income as percentage of the original between 2012 and 1994. Hence for example, for a household with a private sector employee earning one minimum wage disposable income as a percentage of the original would be expected to increase in 4.3 percentage points, for a household with a public sector employee of the same income level the increase would be of 1.6 percentage points and for a households with a self-employed earner of minus 0.9 per cent.

**Figure 24. 2012/1994 Difference in Disposable Income after Taxes and Contributions, 4 Employment Profiles (percentage points)**



Source: Own calculations.

Three household types would obtain a higher disposable income after the changes in contributions and taxes. First, the household type of the private sector employee, which would benefit from higher tax subsidies. Interestingly, the household that would follow would be the one of the self-employed worker earning 25 times the minimum wage, due to the possibility of paying income tax under the minor taxpayers' regime. At five times the minimum wage this employment status would also benefit from that regime. In the case of the household of a public sector worker with low earnings, the positive effect of higher tax subsidies would be reduced by higher social insurance contributions, although the effect of the changes would still be positive.

The losers of the policy changes are high income households of private and public sector employees, in both cases affected by higher income tax rates. The former would be expected to register a drop of 9.1 points in its percentage of disposable income, whilst the latter of 10.7 points. The difference is the effect of higher social insurance contributions for public sector workers. At five times the minimum wage, these employment statuses would also be expected to obtain significant decrements.

## 5.6. Conclusions

This chapter presented the potential effects of reforms in fiscal policy introduced in Mexico between 1994 and 2012. The main winners of the reform process would be expected to be low income households with earners employed in the private sector and high income households with self-employed earners eligible to qualify for the minor taxpayers' regime, namely small shop or workshop owners. The main losers would be high income households with earners employed in the private and public sectors, affected by higher income tax rates and in the case of the latter by the rise of social insurance contributions too.

The objectives of many of the tax changes were not to make the system more or less redistributive. For example, the introduction of the minor taxpayers' regime sought to combat informality and increase the tax base; goals that do not seem to have been reached (SHCP, 2012), as will be discussed in chapter 8. On the reform of public sector employees' social insurance, the rationale behind the rise in contributions was to fund what have been deemed much higher benefit levels compared to private sector employees (OECD, 2009). Nonetheless, the calculations showed that the changes would be expected to have important redistributive effects.

Low income households would receive important benefits proportionally to their original income as long as their earners were employed in the formal sector. The issue that remains is to what extent is the support received compared to the support offered to higher income levels through other tax instruments. For example, the amount that low income households would receive from tax subsidies in 2012 would be \$3,741 (£330 at PPP) in 2012, actually lower than the amount that a high income household would get back from deductions on private healthcare and education, which is \$4,664 (412 at £PPP).

A final point to highlight is that middle and high income families with self-employed earners appear to have gotten a much better deal out of the tax reforms than households with earners who were formally employed. Nonetheless, the fiscal changes can only be fully assessed when complemented by the calculations of the benefits that the system delivers, which is the topic of the following chapters.



## 6. The Effects of Cash Benefits and Private Spending

### 6.1. Introduction

This chapter analyses and compares the potential effects of cash benefits on disposable income. The cash benefits offered by the Federal Government in 2012 through social insurance or social assistance programmes include the following:

- Incapacity benefits to replace income when workers are temporarily unable to perform their job. These benefits cover exclusively formal sector employees and are delivered by the social insurance system since its creation. In the case of private sector employees benefits are regulated by the Social Insurance Law (LSS) (LSS, 1997) and administered by the Mexican Social Insurance Institute (IMSS), and in the case of public sector employees, by the Law of the Institute of Social Security and Services for State Workers (LISSSTE) (LISSSTE, 2007) and the Federal Law for State Workers (LFTSE), (LFTSE, 1963), and are administered by the Institute of Social Security and Services for State Workers (ISSSTE). Both systems offer three types of benefits meant to cover incapacity periods generated by different causes, which are sickness, work injuries and maternity.
- Family benefits to provide income support to low income families, introduced in 1997. These benefits delivered by the social assistance programme *Oportunidades* are targeted and conditional on school attendance by children and on attendance to health related activities by all family members. Benefits' amounts depend on the household's composition; a basic amount is offered to all families whether they have children or not and extra amounts are added for every child in school age. Amounts are higher for girls than for boys and increase for children in higher school grades. The lack of access to social insurance forms part of the main criteria to determine access to the programme.
- Pensions to provide an income when people are deemed permanently unable to work. Pensions are delivered by both the social insurance and social assistance systems. Social insurance offers old-age and retirement, disability, work injuries and survivors' pensions; social assistance offers only old-age pensions. This study analyses old-age pensions, which represent the largest share of the total amount of pensions paid by the Federal

Government. Social insurance pensions exist since the creation of the system and are regulated by the Social Insurance Law (LSS) and administered by the Mexican Social Insurance Institute (IMSS) in the case of private sector employees, and by the Law of the Institute of Social Security and Services for State Workers (LISSSTE) and the institute of the same name (ISSSTE) in the case of public sector employees. Social assistance non-contributory pensions are delivered through the programme *70 y Mas* introduced in 2007. The programme offers old-age pensions to elderly people without a social insurance pension. Initially its coverage was geographically limited to rural areas, but it was later expanded to larger communities and in 2012 to the entire country.

The main indicator that was used to establish the redistributive potential of cash benefits was disposable income expressed as a percentage of original income. Disposable income was calculated by subtracting from original income, the contributions and taxes that the model household would have to pay and adding all cash benefits that it would be entitled to receive according to the system's rules in force in 1994 and 2012. All calculations were done on an annual basis. The chapter discusses the results of the calculations of the model families that better illustrate the changes in the levels of support offered by the system.

The rest of the chapter is divided in five sections. The next section presents the calculations of temporary incapacity benefits, which as mentioned, include sickness, work injuries and maternity benefits. The following section discusses the results of the calculations of family benefits and the fourth section the calculation of pensions. Each of these three sections is divided in three parts, the first part presents benefit amounts, the methodologies to calculate them and the eligibility criteria before and after the reforms, the second part specifies the assumptions made to estimate the effects of benefits on the selected model households, the third part analyses and compares the effects of benefits on disposable income. The final section wraps up the chapter and offers some concluding remarks.

## **6.2. Incapacity Benefits**

### **6.2.1. Incapacity Benefits Eligibility Criteria and Amounts**

Private and public sector employees are entitled to three types of benefits to replace income during spells when they are incapacitated to perform their job. The first type is a sickness benefit when the worker suffers from an illness or is recovering from an accident not related to his work activities. The second type is a benefit for work injuries in case of illnesses or accidents directly derived from work related activities. The third type is a maternity benefit paid to all insured women in work for a set period before and after giving birth; only women in work are entitled to this benefit, so spouses of male insured workers would not receive it.

Benefits for private sector employees are administered by the IMSS and for public sector employees by the ISSSTE. Only the methodology for calculating IMSS incapacity benefits was modified by the reforms, although in practice benefits resulted in the same amounts for all workers. Under the previous law, sickness benefits amounts were taken from a table of nine wage levels. The incapacitated worker's wage was placed in the corresponding level, and the benefit was paid at 60 per cent of the level's average, except for low and high income workers: for workers earning up to 3 times the minimum wage and above 18 times the minimum wage, the benefit was simply calculated at 60 per cent of salary. Maternity leave was paid at 100 per cent of the level's average, except for the same low and high income ranges, for which the benefit amounted to 100 per cent of the registered wage. Both formulas would generate the same replacement rates as the ones obtained by applying the previous methodology. Work injuries benefits were not modified.

In the case of ISSSTE incapacity benefits, neither amounts nor the eligibility criteria were modified by the reform. Table 16 compares amounts, duration and eligibility criteria for each type of benefit between the IMSS and ISSSTE systems for the year 2012. The IMSS sick leave is paid at 60 per cent of wage starting from the fourth day of incapacity, and work injuries and maternity leave at full wage from the first day. The payment of ISSSTE sick leave varies with the length of employment; for example, for a worker employed for less than one year the first 15 days of incapacity are paid at 100 per cent of wage and from the sixteenth day until 52 weeks at 50 per cent of wage. Work injuries, on the other hand, both system pay benefits under the same

conditions as, with 100 per cent of wage covered from the first day of incapacity up to a maximum of 52 weeks. Maternity leave for public sector employees covers a period of six days more than for private sector employees, although in both cases it is paid at 100 per cent of wage.

**Table 16. Incapacity Benefits: Eligibility Criteria and Benefits, 2012**

Benefit	IMSS			ISSSTE		
	Amount	Duration	Eligibility Criteria	Amount	Duration	Eligibility Criteria
Sickness	60% of wage	From 4 <sup>th</sup> day of incapacity until 52 weeks	4 weeks contributions immediately prior to start of leave	100% of wage	15 days	< 1 year employed
				50% of wage	Until 52 weeks	
				100% of wage	30 days	> 1 year < 5 years employed
				50% of wage	Until 52 weeks	
				100% of wage	45 days	> 5 year < 10 years employed
				50% of wage	Until 52 weeks	
				100% of wage	60 days	> 10 years employed
				50% of wage	Until 52 weeks	
Work Injuries	100% of wage	From 1 <sup>st</sup> day of incapacity until 52 weeks	None	100% of wage	From 1 <sup>st</sup> day of incapacity until 52 weeks	None
Maternity	100% of wage	42 days before and 42 days after giving birth	30 weeks of contributions during the 12 months prior to the start of the leave	100% of wage	1 month before and 2 months after giving birth	None

Source: LSS (1997), LISSSTE (2007), LFTSE (1963).

If a person continues to be unable to work after 52 weeks due to an illness not related to his job activities, an extension period of 26 weeks of sick leave will be granted, paid at 60 per cent of wage by the IMSS and 50 per cent by the ISSSTE. If the incapacity persists after the extension period, the worker could be eligible for a disability pension. If an incapacity period due to a work injury continues after 52 weeks, the worker would be eligible to a work injuries pension. If a female employee that gave birth requires more days to recuperate than the ones granted by maternity leave, the extra days are paid like sick leave by both the IMSS and the ISSSTE.

Additional points to consider for the calculations of the effects are that income tax must be paid on income from incapacity benefits and that the payment of social insurance contributions is suspended during periods of incapacity.

### **6.2.2. Assumptions for the Calculation of Incapacity Benefits**

The following assumptions were made for the calculation of incapacity benefits:

- Incapacity benefits were calculated for families with earners formally employed in the private and public sectors.
- For families with earners without social insurance coverage, it was assumed that no income was perceived when they were incapacitated and the income that they would lose for being incapacitated was subtracted from disposable income.
- The study considered for all earners one incapacity period of 7 days due to an illness or accident not related to the earner's job, for all earners.
- The study also considered for all earners one incapacity period of 7 days derived from the earner's work activities.
- For all female earners, one period of maternity at the start of the year<sup>10</sup>.
- Two children were assumed for each household.
- Households with female earners were assumed to be headed by them with no other earners.
- Incapacitated earners covered by social insurance met all the criteria to be eligible for the three types of benefits.

### **6.2.3. Effects of Incapacity Benefits**

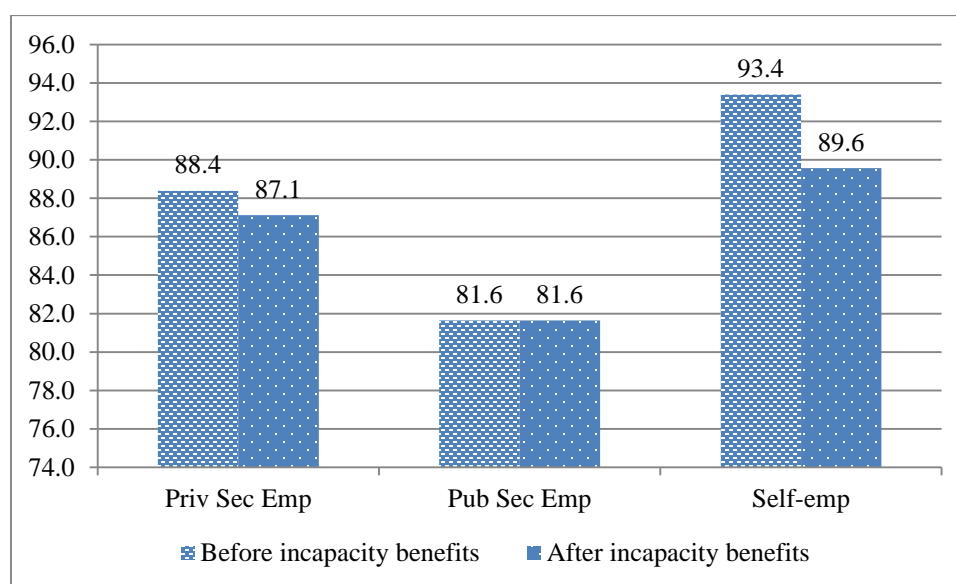
The importance of social insurance coverage is highlighted by the results of the calculations of incapacity benefits. Figure 24 shows the 2012 disposable income as a percentage of the original for male-headed households with original earnings of five times the minimum wage at two moments: after contributions and taxes and after contributions, taxes and incapacity benefits. The effects would be the same for 1994 and for other income levels, since the reforms did not modify the rules and wage replacement percentages do not vary across income levels. The figure shows

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<sup>10</sup> The time of the year when the leave occurs is relevant to calculate the value of childcare.

the results for three employment status: a household with an earner employed in the formal private sector, which would receive benefits from the IMSS; a household with an earner employed in the public sector, which would receive benefits from the ISSSTE and a household with a self-employed earner and no social insurance coverage. The households with its earner employed in the informal economy would show the same effects as the household with the self-employed earner.

**Figure 25. Disposable Income after Incapacity Benefits, 3 Employment Profiles, 2012 (% of Original Earnings)**



Source: Own calculations.

As can be observed, the household with the earner receiving benefits from the IMSS would lose slightly more than one percentage point of disposable income because sick paid leave would not cover the first four days of incapacity and after that fourth day it would only be paid at 60 per cent of wage. The household with an earner receiving benefits from the ISSSTE would not lose any income because all days of incapacity would be covered at 100 per cent of wage. However the case, in both of them social insurance coverage would protect families from loss of income, but households that lack coverage would be left unprotected.

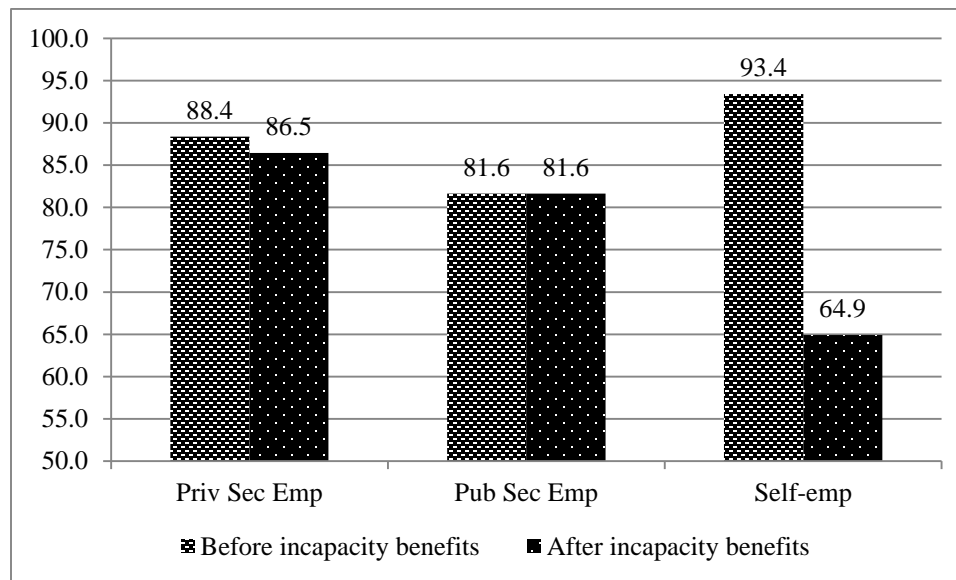
Disposable income of a household with a self-employed earner would drop almost four percentage points if the earner was unable to work during 14 days. The same drop would be

expected for a household with an earner employed in the informal economy; and the larger the incapacity period the higher the percentage of disposable income that would be lost.

Indeed, the figures illustrate the extent to which households with no social insurance coverage are left unprotected from loss of income when earners are unable to work. These figures result from simulating only 14 days of incapacity, however, in practice incapacity periods tend to last for slightly longer periods. For example, the IMSS registers an average of 10 days of incapacity for each incapacitated worker due to an illness not related to his/her job, and 27 days for each incapacitated worker due to a work injury (Echevarría-Zuno et al., 2008). Hence the disadvantage of not being protected against illnesses and accidents could in practice be much worse than what the figure shows.

The disadvantage of not receiving social insurance coverage is more serious for households with female earners. For the calculations these households were assumed to be headed by women with no other earners, with a period of 90 days of incapacity due to the birth of a child. Maternity leave for private sector employees only covers 84 days in total, 42 days before and 42 days after birth, and the system's rules state that any additional days of incapacity derived from giving birth to a child would be paid as a sick leave at 60 per cent of wage. Maternity leave for public sector employees covers the whole period of 90 days, one month before and two months after birth. Self-employed women would not be entitled to social insurance and would not receive any protection from loss of income. Figure 25 compares the 2012 disposable income as a percentage of the original before and after periods of incapacity. The indicators include all taxes and contributions and three periods of incapacity: one due to an illness not related to their job, one due to a work injury and one due to maternity.

**Figure 26 Disposable Income of Female-Headed Households after Incapacity Benefits, 3 Employment Profiles, 2012 (% of Original Earnings)**



Source: Own calculations.

The results illustrate the difference in the levels of protection across employment status. The household with the female earner employed in the public sector would enjoy full income protection since all days of incapacity would be paid at 100 per cent of wage. The household with the earner employed in the private sector would register a drop in its disposable income of almost two percentage points, slightly more than a household headed by a male earner of the same employment status because six days of maternity incapacity would be paid like sick leave. The lowest drop would be registered for female headed households with no social insurance coverage because they would not receive any benefits; hence their disposable income would drop in almost 30 percentage points if they had taken 90 days off work to prepare and recover from giving birth.

The results of the calculations illustrate the different levels of protection offered the Mexican system to families whose earners are affected by an event that would incapacitate them to perform their job. Public sector workers would enjoy higher levels of income protection than workers employed in the private sector; whilst families with no social insurance coverage would be left completely unprotected. Families of female earners with no social insurance who decide



to have a child would be even more unprotected, because of the lack of maternity benefits. The next section discusses the effects of cash benefits offered by the *Oportunidades* programme.

### **6.3. Family Cash Benefits: Conditional Cash Transfers**

#### **6.3.1. Eligibility Criteria and Benefit Levels**

Family cash benefits are offered by the *Oportunidades* programme. This is a targeted social assistance programme that delivers conditional cash transfers to poor families. It was created in 1997 with the name of Programme for Education, Health and Nutrition, or *Progresa* for its acronym in Spanish, but it was changed to its current name in 2002. This programme represents the first means-tested targeted programme of cash benefits in the history of the country's social policy. In 2012 *Oportunidades* covered 5.8 million families, which meant that one in every five Mexicans was a beneficiary (SEDESOL, 2012).

Eligibility is determined by applying a targeting mechanism that estimates the per capita net cash income of potential beneficiary households. Net cash income refers to disposable income after the payment of taxes and before government transfers (ENIGH, 2012). Data is collected for each household and its income is estimated according to 18 socioeconomic variables. These variables represent the determinants more strongly associated to poverty in the national household income and expenditure surveys. Variables vary for urban and rural settings; three of the, which apply for both contexts, associated with lack of access to social insurance benefits:

- At least one of the household members has access to healthcare services due to his/her employment.
- The household head is an independent workers and at least one household member has access to healthcare services due to his/her employment.
- The community's social deprivation index composed of 13 indicators, among them, the percentage of families with no access to social insurance healthcare.

The official poverty measurement methodology adopted in 2008 sets two poverty lines, with different lines for rural and urban areas. The bottom line is called the 'minimum welfare line' (MWL), which represents the minimum income that a person requires to meet his/her nutrition needs. The second line is called the 'welfare line', which represents the income required for

nutrition and other basic needs. The thresholds to establish eligibility to *Oportunidades* are set between these two lines.

Families are incorporated to the programme if their estimated per capita income falls below a line called ‘adjusted minimum welfare line’ (AMWL). Different lines are set for urban and rural areas. The lines are adjusted versions of the ‘minimum welfare lines’ called MWL mentioned above. Families whose income improves after having been incorporated in the programme can remain in it as long as their estimated income does not surpasses another threshold called ‘permanent verification of socioeconomic conditions line’ (PVSCL), also with different levels set for rural and urban communities. The PVSCLs are fixed between the MWL and the ‘welfare line’. The 2012 amounts of all income lines are shown in Table 4.2. Families with an estimated income above the AMWL but below the PSVCL are only entitled to a limited package of benefits called ‘differentiated support scheme’ (EDA). If the estimated income is more than the PSVCL, the family loses entitlement to the programme. The monthly amounts of poverty lines and *Oportunidades*’ thresholds lines are shown in Table 17.

**Table 17. Monthly Per Capita Amounts of Poverty Lines and *Oportunidades* Eligibility Thresholds, 2012 (pesos/pounds)**

Communities	Minimum Line (MW)	Welfare	Adjusted Welfare Line (AMW)	Minimum	Permanent Verification of Socioeconomic Line (PVSC)	Verification of Conditions	Welfare Line (WL)	
Rural	\$684	£60	\$716	£63	\$1,146	£101	\$1,331	£118
Urban	\$978	£86	\$1,243	£110	\$1,538	£136	\$2,120	£187

Source: SEDESOL (2013).

The programme offers several types of benefits which depend on the gender, age and school grade of family members. Benefits are grouped in two types, one group associated to the nutrition and health components of the programme and the other group to the education component. The operation rules state that benefits’ amounts should be updated every six months, like the official poverty lines. Benefit packages differ among rural and urban areas; more benefits are offered to rural communities but of lower amounts. In the case of urban

communities, three different packages were being piloted in 2012 because of the low impact that previous interventions had on poverty levels (SEDESOL, 2013).

The benefits associated to the programme's nutrition and education components are listed in tables 18, 19 and 20, along with their respective amounts for the first and second semesters of 2012. Same amounts apply for urban and rural areas. A basic benefit called 'nutrition support' is paid to all households regardless of their characteristics. After the financial crisis of 2008, two benefits were added to support the nutrition needs of beneficiaries as a compensation for the rise in food prices; one benefit was called 'living better' paid also to every family regardless of their composition and the other one 'living better for children' paid only to families with children between 0 and 9 years old with a maximum of three benefits per month per family. A fourth benefit is paid to households with elderly people above 70 years old, but by 2012 it was being phased out and the rules established that beneficiaries should be transferred to the non-contributory pension programme '*70 y Mas*'. These four types of benefits are conditional on attendance of household members to health related activities.

**Table 18. Monthly Amounts of *Oportunidades* Nutrition Benefits, 2012 (pesos/pounds)**

Concept	January-June		July-December	
<b>Nutrition Support</b>	<b>\$305</b>	<b>£27</b>	<b>\$315</b>	<b>£28</b>
<b>Living Better</b>	<b>\$130</b>	<b>£12</b>	<b>\$130</b>	<b>£12</b>
<b>Living Better for Children<sup>1/</sup></b>	<b>\$110</b>	<b>£10</b>	<b>\$115</b>	<b>£10</b>
<b>Elderly People</b>	<b>\$335</b>	<b>£30</b>	<b>\$345</b>	<b>£31</b>

Source: (SEDESOL, 2013)

1/ Maximum of three benefits per family.

The bulk of the benefits correspond to scholarships for school age children. These transfers are offered for every child from the first level of primary school to the last level of high school, conditional on school attendance. Amounts vary according to the level and gender of children. Table 19 lists the amounts of primary school scholarships. These scholarships would be offered to rural families. From first to third level of primary school the same amount is delivered for

boys and girls; amounts then increase for the fourth, fifth and sixth grades, still with no difference between boys and girls.

**Table 19. Monthly Amounts of *Oportunidades* Primary School Scholarships, 2012**  
(pesos/pounds)

School Grade	January-June		July-December	
	\$	£	\$	£
<i>Primary School</i>				
First	\$160	£14	\$165	£15
Second	\$160	£14	\$165	£15
Third	\$160	£14	\$165	£15
Fourth	\$185	£16	\$195	£17
Fifth	\$240	£21	\$250	£22
Sixth	\$320	£28	\$330	£29
School materials <sup>1/</sup>	\$300	£26	\$330	£29

Source: (SEDESOL, 2013)

1/ Paid once per year in the second semester of each year.

Table 20 lists the amounts of secondary and high school scholarships. Benefits also increase at every level but higher amounts are paid for girls than for boys. There is also a transfer for purchasing school materials paid during the second semester of each year. Finally, a lump sum called ‘*Oportunidades* youths’ is paid when a child graduates from high school.

**Table 20. Monthly Amounts of *Oportunidades* Secondary and High School Scholarships, 2012 (pesos/pounds)**

School Grade	January -June								July-December							
	Rural				Urban				Rural				Urban			
	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys
<i>Secondary School</i>																
First	\$495	£44	\$465	£41	\$615	£54	\$585	£52	\$510	£45	\$480	£42	\$635	£56	\$605	£53
Second	\$545	£48	\$495	£44	\$670	£59	\$620	£55	\$565	£50	\$510	£45	\$690	£61	\$640	£57
Third	\$600	£53	\$520	£46	\$735	£65	\$655	£58	\$620	£55	\$535	£47	\$755	£67	\$675	£60
School materials <sup>1/</sup>									\$415	£37	\$415	£37	\$415	£37	\$415	£37
<i>High School</i>																
First	\$900	£79	\$785	£69	\$1,100	£97	\$980	£87	\$930	£82	\$810	£72	\$1,285	£113	\$1,155	£102
Second	\$960	£85	\$845	£75	\$1,175	£104	\$1,055	£93	\$995	£88	\$870	£77	\$1,285	£113	\$1,155	£102
Third	\$1,020	£90	\$895	£79	\$1,240	£109	\$1,115	£98	\$1,055	£93	\$925	£82	\$1,285	£113	\$1,155	£102
School materials <sup>1/</sup>									\$415	£37	\$415	£37	\$415	£37	\$415	£37
<i>Oportunidades youths</i> <sup>2/</sup>	\$4,192	£370	\$4,192	£370	\$5,764	£509	\$5,764	£509	\$4,450	£393	\$4,450	£393	\$5,956	£526	\$5,956	£526

Source: (SEDESOL, 2013)

1/ Paid once per year in the second semester of each year.

2/ Paid as a lump sum when a child graduates from high school.

As mentioned before, three different packages for urban areas were being piloted in different areas of the country in 2012. The first package referred to as ‘Intervention 1’ consisted of all the benefits and amounts listed in the tables above for urban areas. The second package or ‘Intervention 2’ consisted of the same benefits and amounts plus an extra benefit of \$295 per child in secondary and high school for school achievement, hence granted only to children with good school performance. The third package or ‘Intervention 3’ consisted of the same benefits and amounts offered in rural communities but without the scholarships for the first and second years of primary school.

Table 21 shows the maximum amounts a family can receive per month. The limits are set to discourage the formation of large families. Same maximum amounts are fixed for urban and rural areas. There is one limit on the total amount of scholarships and the nutrition support ‘living better for children’ that a family can receive per month. Another limit is set for the total monthly amount adding all benefits. Different limits are set for families with children in basic education and for families with children in secondary and high school. The limits set for the total amount exclude transfers for school materials, the benefit for elderly people and the lump sum paid to children who graduate from high school.

**Table 21. Maximum Amounts of *Oportunidades* Benefits, 2012 (pesos/pounds)**

Limits	January-June				July-December			
	With Children in Primary and Secondary School		With Children in High School		With Children in Primary and Secondary School		With Children in High School	
Scholarships plus nutrition ‘living better for children’	\$1,225	£108	\$2,245	£198	\$1,265	£112	\$2,320	£205
Total	\$1,660	£147	\$2,680	£237	\$1,710	£151	\$2,765	£244

Source: (SEDESOL, 2013)

There are also different benefit packages for families whose income rises above the ‘adjusted minimum welfare line’ (AMWL) but stays below the ‘permanent verification line’. This package is called the ‘differentiated support scheme’ (EDA), and consists only of the secondary and high school scholarships, including school materials and the lump sum for children who graduate from high school, with the same differences between urban and rural

areas. All other benefits are eliminated. Amounts are subjected to the same maximum limits as the packages offered to families with incomes below the AMWL.

### 6.3.2. Assumptions for the Calculation of Conditional Cash Transfers

The first assumption made for the calculations was that only families without social insurance coverage received *Oportunidades* benefits. Unlike other social assistance benefits, *Oportunidades* does not explicitly targets families with no social insurance, although, as mentioned previously, three of the variables to determine eligibility to the programme refer to the lack of access to social insurance. It is possible then for a family to be covered by the IMSS, for example, and receive *Oportunidades* benefits. However, according to the Health and Nutrition National Survey, in 2012 only a minor percentage, 11.3 per cent, of *Oportunidades* beneficiary families enjoyed social insurance coverage (ENSANUT, 2012). Hence, *Oportunidades* benefits were only calculated for households with earners who were self-employed paying income tax or employed or self-employed in the informal economy not paying any taxes.

Other assumptions that were made for the calculation of family benefits were the following:

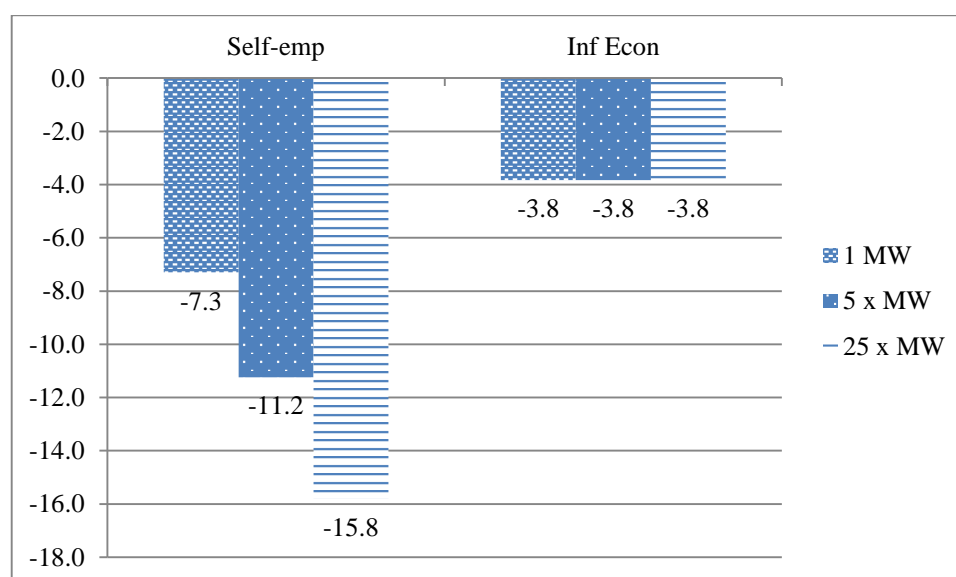
- Income level and household composition remained the same throughout the year.
- The income used to determine eligibility to the programme was the per capita disposable income after the payment of taxes and after discounting lost income due to days of incapacity, adjusted by economies of scale and equivalence scales, following the same methodology applied for the estimation of the official poverty lines and hence the thresholds to determine eligibility to *Oportunidades*.
- Household economies of scale and equivalence scales reflect the distribution of income within each household and the possibility of sharing income among members. The scales by age range used in this study were taken from the ones used by the CONEVAL for the estimation of poverty lines: 0.70 for members 0-5 years, 0.74 for members 6-12 years, 0.71 for members 13-18 years and 0.99 for members above 19 years (CONEVAL, 2011).
- No benefits for elderly people were calculated because it was assumed that they would be beneficiaries of the non-contributory pension *70 y mas*.
- All children were assumed to be girls in order to illustrate the maximum amounts that the programme could pay.

- Families met all conditions required by the programme's rules and benefits were not suspended during the year.
- Families were assumed to be living in urban areas, in order to make the calculations comparable to those of other employment status also assumed to be urban families.
- Calculations were based on the package 'Intervention 1', the most common package in urban areas (SEDESOL, 2013).

### 6.3.3. Effects of Conditional Cash Transfers

*Oportunidades* would have a strong effect on disposable income of recipient families. In 1994 families with self-employed or earners employed in the informal economy would not have been entitled to any cash benefits. Figure 26 shows the 1994 percentage of variation in disposable income after lost income due to incapacity spells, and figure 27 shows the same indicator for the year 2012, adding the targeted *Oportunidades* family benefits. Household composition in both graphs would be the standard one compared across this study: a male earner, with a non-working spouse, one newly born child and one child in primary school. Results are shown for the relevant income levels to illustrate effects.

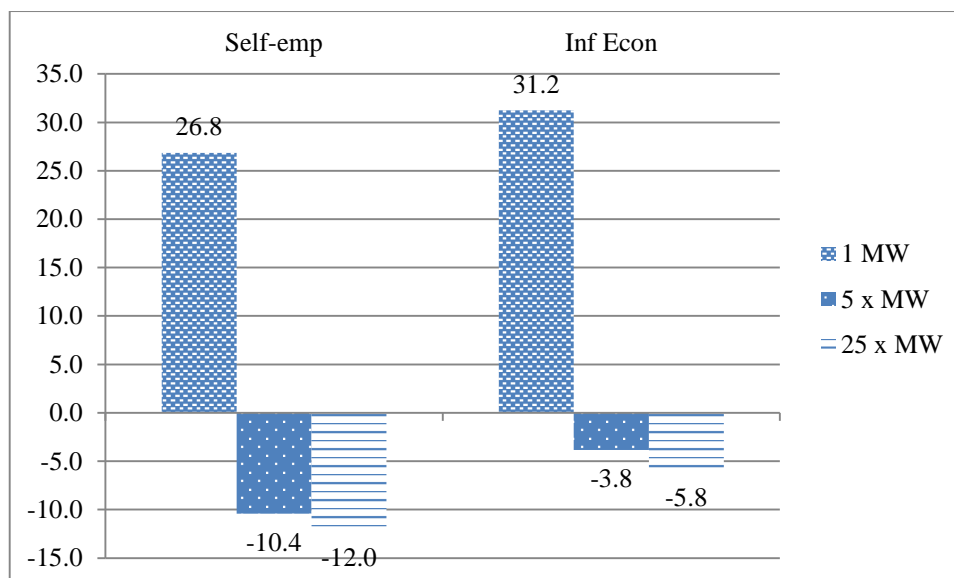
**Figure 27. Variation between Disposable Income after Cash Benefits and Original Earnings, Self-employed and Informal Workers, 1994 (percentage)**



Source: Own calculations.



**Figure 28. Variation between Disposable Income after Cash Benefits and Original Earnings, Self-employed and Informal Workers, 2012 (percentage)**

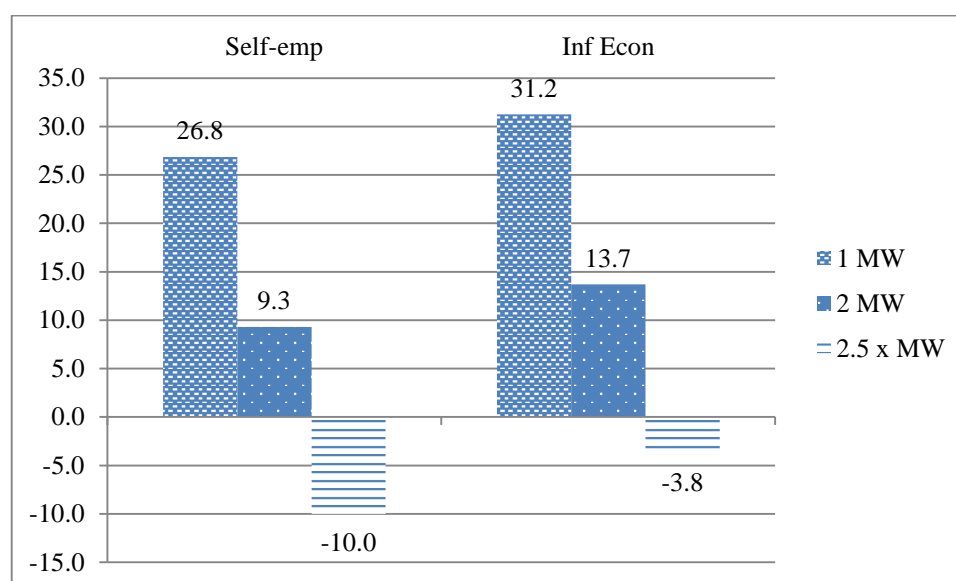


Source: Own calculations.

In 1994, disposable income of all family types would fall below the original. Families of self-employed earners would register larger drops because they would be paying income tax, whilst families of earners employed in the informal economy would only have been affected by the loss of income because of incapacity periods. In 2012, *Oportunidades* benefits of family types with original earnings of one minimum wage would increase disposable income in more than 25 percentage points for both employment statuses, with the household of the earner employed in the informal economy expected to register higher disposable income because it would not be paying income tax.

At original earnings of five times the minimum wage families would not be eligible to the programme and their disposable income would fall below the original. To illustrate the extent to which *Oportunidades* benefits reach families across the bottom of the income scale, figure 28 compares disposable income after cash benefits as a percentage of the original for three levels of original earnings: one minimum wage, two minimum wages and 2.5 times the minimum wage. The household composition is the same as the one compared in the previous two graphs.

**Figure 29. Variation between Disposable Income after Cash Benefits and Original Earnings, Low Income Self-employed and Informal Workers, 2012 (percentage)**



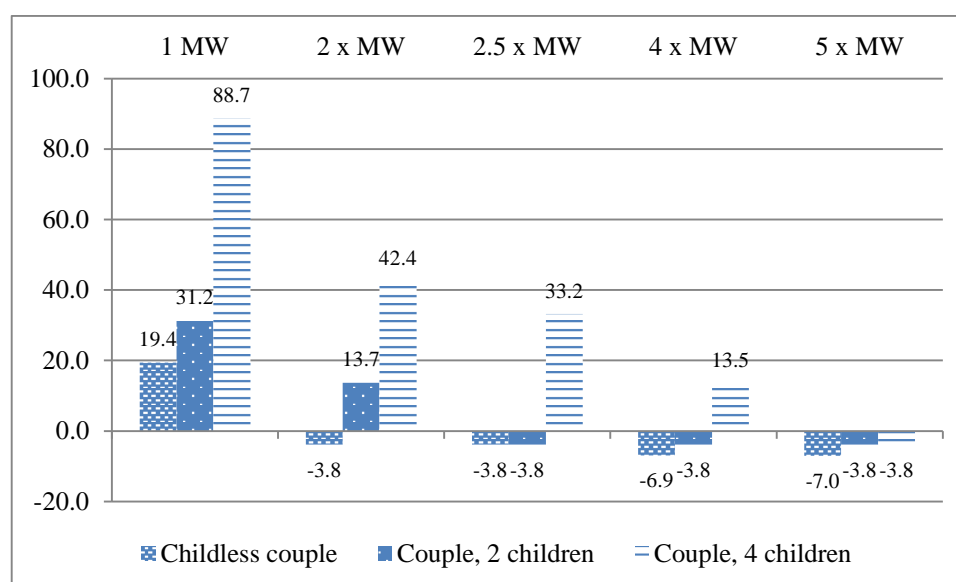
Source: Own calculations.

The figure reveals that for the standard family type, benefits would be lost at a low earnings level, of only 2.5 times the minimum wage. For family types earning two times the minimum wage, benefits would raise disposable income in around 10 percentage points more than the original. After that level, families could only be eligible to the EDA, but because that package only offers scholarships for children in secondary and high school, no cash benefits would be paid; hence income of the family type of a self-employed earner would drop 10 percentage points below the original. According to the calculations conducted for this study, eligibility to the EDA would continue until after an earnings level of three times the minimum wage, however, in practice the families would not be expected to be receiving any income support from the state.

The previous graphs presented the results for only one household composition. It would be interesting then to test the effects of benefits on other compositions, since benefit amounts vary with the characteristics of family members. Figure 29 compares the variations in disposable for 2012 of three household compositions –a childless couple; the standard family type of four members; and a couple with a male earner and four children, two young ones as the standard family plus one child in secondary school and one child in high school– at five levels of original earnings –one minimum wage, two, 2.5, four and five times the minimum

wage. In this graph only households of one employment status are shown, that is households with earners employed in the informal economy, but the effects would be to households of self-employed earners.

**Figure 30. Variation between Disposable Income after Cash Benefits and Original Earnings, Informal Workers, 2012 (% of Original Earnings)**



Source: Own calculations.

Benefits increase substantially with the number and school grade of children. A childless couple would be eligible at the lowest earnings level and benefits would only raise its disposable income in 19 per cent. As commented above, the couple with two young children would still receive benefits at two times the minimum wage but would lose them at 2.5 times the minimum wage. A couple with four children, on the other hand, would continue to receive benefits until a level of four times the minimum wage. All family compositions would lose eligibility at five times the minimum wage.

For the couple with four children earning one minimum wage, *Oportunidades* would almost double disposable income, more than half the support offered to the couple with two young children. In fact, couples with four children earning up to 2.5 times the minimum wage would be expected to receive more support than a couple with young children earning one minimum wage.

Two causes are behind the higher benefit levels offered to larger families or to families with children in higher school grades. First, as commented, benefit amounts would be higher

because there are more children and because the children are in higher school grades, for which the scholarships are higher. For example, as can be observed Table 28 described above, a scholarship for a girl in the third year of high school would be double the amount of a scholarship paid to a girl in the first year of secondary school.

Secondly, eligibility would expand to cover families of higher income levels because per capita income would decrease as the number of family members grows. An interesting analysis then would be to compare per capita income after benefits with per capita poverty thresholds to establish the degree to which the programme can be an effective tool to combat poverty. This analysis is carried out in chapter 8.

In summary, before the *Oportunidades* programme was introduced, households not covered by social insurance were not receiving any support from the state in the form of cash benefits. The programme represents a great expansion of social policy in Mexico and its benefits are an important source of support for the recipient families. Nonetheless, the calculations presented in this section reveal two problems with its design. First, strict targeting means that many households which may require support are being left out; for example, an urban couple with two young children earning 2.5 times the minimum wage which would not be expected to receive any benefits as the graphs above show. Secondly, *Oportunidades* provides substantially higher levels of support to families with older children, paying less attention to the welfare of families with young children. This effect could be due with the programme's objectives that do not seek to reduce current poverty levels but rather to enable families to overcome their condition of poverty in the long term. Further implications of these two issues are discussed in chapter 8.

## **6.4. Pensions**

### **6.4.1. Pensions Eligibility Criteria and Amounts**

Old-age pension are offered by both the social insurance and social assistance systems. Social insurance is divided between the system for private sector employees, namely the IMSS, and the system for private sector employees, namely the ISSSTE. These systems were reformed in 1997 and 2007, respectively. Both reforms consisted in the replacement of pay-as-you-go systems of defined benefits with systems of individual capitalisation and defined

contributions. Changes included the modification of eligibility criteria and of the formulas to calculate pensions.

Table 22 outlines the characteristics of both systems before and after the reforms. The retirement age of 65 years for IMSS beneficiaries was not modified by the reform; a worker can access an advanced pension when turning 60 years old. The methodology to obtain the amount depended on the worker's last wage, with a basic amount calculated from the percentage of the average wage of the last 250 weeks of contributions, plus an additional percentage for each year of contributions after the first 500 weeks. Percentages decreased as the wage level rose. The percentages and wage brackets are laid out in Article 167 of the LSS. The advanced pension represented a percentage of the old-age pension, from 75 per cent when a worker retired at 60 years to 95 per cent when retiring at 64. The 1997 reform replaced the system of defined benefits for an individual capitalisation system of defined contributions. Pensions were converted into life annuities with amounts dependable on the balance each worker had in their individual account at the moment of retirement and their life expectancy.

The ISSSTE system was offering three types of pensions in 1994. The retirement pension was paid at 100 per cent of the last wage after 30 years of service for men and 28 for women with no age requirement; the pension for years of service was offered when a worker turned 65 years old and was paid at percentages that went from 50 per cent the retirement pension after 15 years of service to 95 per cent after 29 years; and the old-age advanced pension was paid after 10 years of employment at amount that went from 40 per cent of the retirement pension when the worker turned 60 years old to 50 per cent when the worker turned 65. The ISSSTE reform increased contribution periods, raised retirement ages and introduced life annuities, making the system more similar to the IMSS system.

**Table 22 Characteristics IMSS and ISSSTE Pension Systems Before and After the Reforms**

System	Eligibility criteria	Amount
<b>Pay-as-you-go systems before the reforms</b>		
<b>IMSS (1973)</b>		
Old-age pension	- 500 weeks of contributions - 65 years of age	Percentage average wages of previous 250 weeks of contributions; from 80% for 1MW to 13% for more than 6MW + increments for years contributed above 500 weeks + family allowances or care allowance <sup>1/</sup>
Advanced pension	- 500 weeks of contributions - 60 years of age	Percentage of old-age pension. 60 years – 75%, 61 years – 80%, 62 years – 85%, 63 years – 90%, 64 years – 95% + family allowances or care allowance <sup>1/</sup>
<b>ISSSTE (1983)</b>		
Retirement pension	- 30 years of employment for men, 28 years for women.	100% of average wage of last year of employment.
Years of service	- 15 years of employment - 55 years of age	Percentage of average wage of last year of employment. From 50% for 15 years of employment to 95% for 29 years.
Advanced pension	- 10 years of employment - 60 years of age	Percentage of average wage of last year of employment. 60 years – 40%, 61 years – 42%, 62 years – 44%, 63 years – 46%, 64 years – 48%, 65 years – 50%.
<b>Individual capitalisation systems after the reforms</b>		
<b>IMSS (1997)</b>		
Old-age pension	- 1,250 weeks of contributions - 65 years of age	- Life annuity depending on individual account balance and average life expectancy
Advanced pension	- 1,250 weeks of contributions - 60 years of age	- Life annuity depending on individual account balance and average life expectancy.
<b>ISSSTE (2007)</b>		
Old-age pension	- 25 years of contributions - 65 years of age	- Life annuity depending on individual account balance and average life expectancy.
Advanced pension	- 25 years of contributions - 60 years of age	- Life annuity depending on individual account balance and average life expectancy.

Sources: LSS (1973, 1997), LISSSTE (2007, 1983).

1/ An extra month was paid as Christmas bonus in December. Family allowances were paid for each of the pensioner's economic dependants and amounted to 15% of the pension. When the pensioner did not have economic dependants, a care allowance of 15 per cent of the pension was granted.

Previous to and after the reforms, both systems guaranteed minimum pensions when a worker met the criteria to be eligible but the amounts obtained from applying the calculation formulas were too low. Table 23 compares the amounts of the minimum pensions in 1994 and 2012, expressed in 2012 pesos and converted to pounds at purchasing power parity. In 1994 both minimum pensions were set at the same level, which was 90 per cent of one minimum wage. The reforms introduced a difference, almost doubling the ISSSTE pension in relation to the IMSS pension. In fact, although if expressed in times the minimum wage the IMSS pension would appear to be higher in 2012 than in 1994, in real terms it is actually slightly lower. Another point to comment is that in 1994 the IMSS law established a maximum limit on the pension amount of 100 per cent of the pensioner's last wage; the ISSSTE law did not set any similar limit.

**Table 23 Amounts of Minimum Pensions, 1994 and 2012 (2012 pesos/pounds)**

Programme	1994			2012		
	\$	X MW	£	MX \$	X MW	£
<b>IMSS</b>	<b>2,242</b>	<b>0.90</b>	<b>198</b>	<b>2,179</b>	<b>1.17</b>	<b>192</b>
<b>ISSSTE</b>	<b>2,279</b>	<b>0.91</b>	<b>201</b>	<b>3,765</b>	<b>2.01</b>	<b>332</b>

Sources: LSS (1973, 1997), LISSSTE (2007, 1983).

There are two more important differences can be observed between the reformed IMSS and ISSSTE systems. The first one was that active public sector employees were given the chance to choose if they wanted to be transferred to the new system or not; so only the workers who joined the public sector after the enactment of the new legislation were compulsorily placed under the new system. If the worker refused to be transferred to the reformed system, contributions continued to be paid under the rules of the old system and the pay-as-you-go pension system was kept, but with stricter rules, with a minimum pension age set for retirement pensions and gradual increases of the pension age for the other two types of pension. On the other hand, the IMSS reform automatically transferred all workers to the new system in July of 1997, although the ones that had contributed before that month would be

given the option at the moment of retirement to choose if they wanted to retire under the rules of the old or the new systems,

The second one was that public sector workers who opted to transfer to the new system were offered a pension bonus to compensate for the years contributed to the old system. The pension bonus was deposited as a lump sum in their individual accounts to constitute an initial balance. The bonus amount was calculated according to the worker's age, wage and time of employment, according to a table included in the new ISSSTE law. Private sector employees on the other hand, were not given this benefit, hence started to contribute to the new system with no initial balance in their individual accounts.

Besides the reforms of social insurance pensions, the other major change in the policy area was the introduction of non-contributory flat-rate social assistance pensions. These pensions were introduced in 2006 for elderly people that did not have a social insurance pension. The programme was called '*70 y Mas*' ('70 and more'). The programme was originally targeted at people living in rural communities of less than 2,500 inhabitants. The rules established that all persons 70 years old or older in those communities would be entitled to a non-contributory as long as they were not receiving a social insurance pension. Coverage of communities was gradually expanded. In 2008 it was expanded to all communities of less than 20 thousand inhabitants, in 2009 to communities of less than 30 thousand, and finally in 2012 to all cities and communities in the country. Hence, in that latter year, all people in the country who were 70 years old or older and did not have a social insurance pension were entitled to the non-contributory pension. The programme did not establish any other means or income test. The amount offered had not been modified since the creation of the programme; it amounted to a monthly pension of \$500 (£43) for every person not receiving a social insurance pension regardless of their previous earnings. The only benefit that was added was a lump sum of \$300 (£26) to all pensioners who opened a bank account where their pension could be deposited (SEDESOL, 2014).

#### **6.4.2. Assumptions for the calculation of pensions**

The following assumptions were made to estimate the effects of the pension reforms:

- All earners obtain their pension on the first day of 1994 and 2012.
- Social insurance pensions were calculated assuming that the worker was 70 years old at the moment of retirement, to make them comparable to non-contributory pensions.



This assumption was especially relevant for the calculation of life annuities: amounts would have been less if a lower age had been used because the pensioner is expected to live more years. According to the OECD (2014), the average age at which Mexicans retired was 74.5 years in 1994 and 72.3 years in 2012 for men, and slightly lower ages for women.

- Employment statuses, earnings and social insurance contribution levels remained steady for all persons throughout their working lives.
- Formal sector workers had 25 years of contributions to social insurance in both years.
- Private sector workers in 2012 opted to be pensioned under the rules of the reformed system.
- Public sector workers opted to be transferred to the new system on April 1, 2007, the day after the enactment of the reform.
- Individual accounts balances of private and public sector employees were calculated by adding the tripartite contributions of the old-age and retirement branch that would have been deposited in each worker's individual account during the 25 years of contributions. The annual return net rates used to calculate balances were the following: for the period 1997-2008, 3.2 per cent; for the period 2007-2008, 5.6 per cent; for the period 2009-2012, 8.6 per cent. The rates for the first two periods were taken from Kato (2008), and the last period from CONSAR (2014).
- Life annuities for private and public sector workers in 2012 were calculated using the on line calculator of the National Commission for the Retirement Savings System (CONSAR)<sup>11</sup>.
- Households were assumed to be composed of the pensioner and one economic dependent.

#### **6.4.3. Effects of Pensions**

This section illustrates the differences in the pension amounts offered by the different segments of the system, using the replacement rate as the main indicator. The replacement rate is the percentage that the pension would represent of the original earnings of the pensioner before retirement. The comparison of replacement rates does not illustrate the effects of other features of the pension system, especially the retirement age that in 1994 was

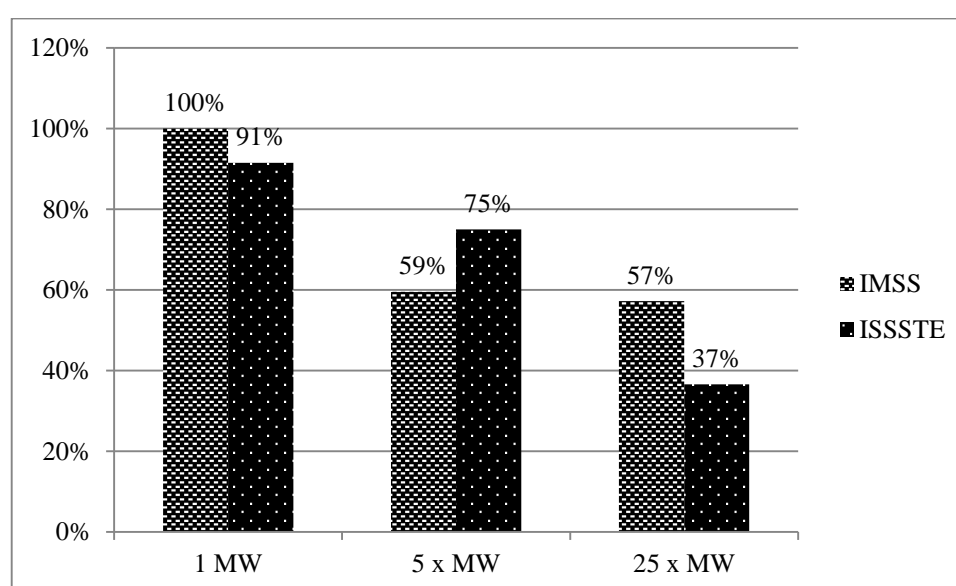
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<sup>11</sup> The calculator can be accessed through this link:  
<https://www.consar.gob.mx/calculadoraahorro/calculadora.aspx>

much lower for public sector employees. A dynamic simulation could be conducted to estimate those effects, nonetheless, that type of analysis falls outside the scope of this thesis.

Figure 30 compares the replacement rates of IMSS and ISSSTE pensions for 1994 at three income levels. IMSS 1994 pensions include increments of 15 per cent for the family allowance of one economic dependent. In that same year, given the assumed years of contributions and age of retirement, public sector workers would be eligible to a pension for years of service, paid at 75 per cent of a retirement pension.

**Figure 31 Social Insurance Pensions' Replacement Rates, 1994 (% of wage)**

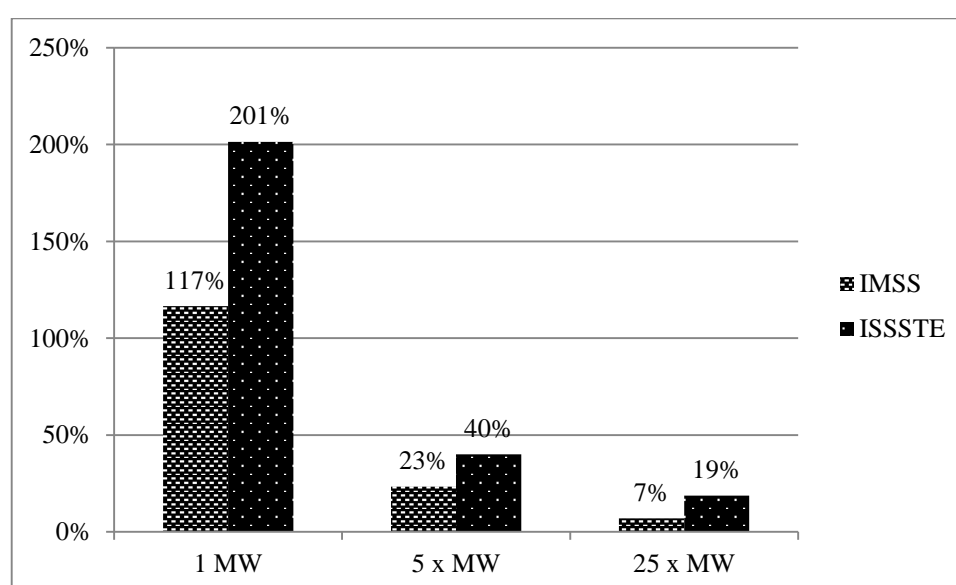


Source: Own calculations.

Given the assumptions made, in 1994 the IMSS rules would have been more favourable to low and high income workers than the ISSSTE's rules. At the lowest income level the IMSS would have paid a pension equivalent to 100 per cent of previous original earnings, higher than the replacement rate of 91 per cent offered by the ISSSTE, the difference due to the 15 per cent increase offered by the IMSS as family allowance for the pensioner's economic dependent. At five times the minimum wage, the ISSSTE would pay a pension significantly higher than the IMSS. On the other hand, at 25 times the minimum wage, the ISSSTE's pension would be lower because of the cap of 10 minimum wages on the payment benefits, whilst IMSS pension would not be affected because in that system benefits were capped at 25 times the minimum wage.

The results change if the rules of the reformed systems are applied. Figure 31 compares the replacement rates of IMSS and ISSSTE pensions or life annuities at three income levels. As mentioned previously, amounts were calculated based on the individual account balance that workers would be expected to accumulate from the time when the systems were reformed until the moment of retirement. The tripartite contributions that would have been deposited in the individual accounts were calculated from the month when the reforms were implemented, namely July 1997 for the IMSS system and April 2007 for the ISSSTE system, until the last month of 2011, applying the net annual rates mentioned in the previous section. The pension bonus offered as compensation for the years contributed to the pay-as-you-go system was added to the balances of ISSSTE beneficiaries.

**Figure 32. Social Insurance Pensions' Replacement Rates, 2012 (% of previous earnings)**



Source: Own calculations.

Two conclusions can be highlighted from the calculations. First, the ISSSTE reform resulted in much more generous conditions for public sector employees than the IMSS reform. As can be observed in the graph, ISSSTE's rates would be expected to be much higher than IMSS's rates for all income levels, even if ISSSTE affiliates would have been contributing to their individual account for a shorter period. At previous earnings of one minimum wage, affiliates of both systems would only be entitled to the minimum guaranteed pension, but the ISSSTE pension would represent more than double the pensioner's previous earnings. At five times the minimum wage, the IMSS beneficiary would still receive the minimum guaranteed

pension because the resources accumulated in the individual account would be insufficient to obtain a higher pension; but the ISSSTE beneficiary would receive a life annuity equivalent to 40 per cent of previous earnings, because of the pension bonus deposited in the individual account, benefit that was not offered by the IMSS. In fact, according to the calculations made for this thesis, an IMSS beneficiary would have received a minimum guaranteed pension until reaching an earnings level of 23 times the minimum wage. At 25 times the minimum wage the ISSSTE's rate would be more than double also because the pension bonus would increase the individual account balance.

Secondly, except for workers with previous earnings of one minimum wage, replacement rates would be expected to be much lower in 2012 than in 1994. Workers at the lowest end of the income scale would benefit from higher minimum guaranteed pensions, but for all others, the individualisation of accounts would result in lower pension amounts. Individual account balances were calculated adding 15 years of contributions for IMSS affiliates and seven years for ISSSTE affiliates. It could be argued that longer contribution periods would result in life annuities of higher amounts. Nonetheless, the strong risk of low pension amounts under the individual capitalisation systems has been acknowledged in official documents (WB, 2013), for example, it is estimated that by 2021, when workers insured by the IMSS lose the option of retiring under the pay-as-you-go system, 71 per cent of the ones who meet the criteria will only be entitled to receive a minimum guaranteed pension.

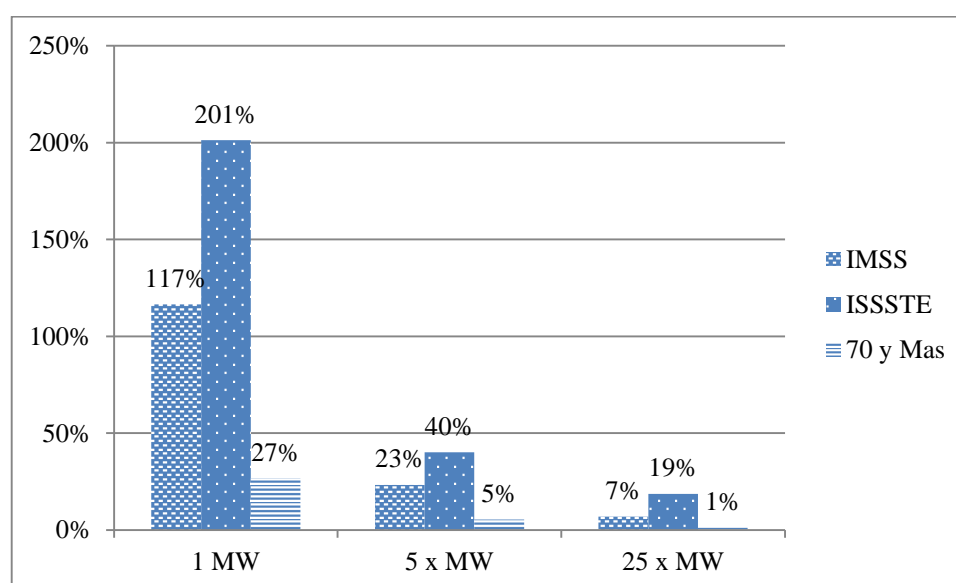
According to calculations made for this study to further probe the effects of pension reforms, a private sector employee with original earnings of five times the minimum wage, that began contributing to the individual capitalisation system in 1997, would have to contribute for 44 years until 2031, to reach a replacement rate of 59 per cent, like the one expected to be obtained under the pay-as-you-go system after 25 years of contributions. These calculations assumed a steady record of contributions without interruptions which would not necessarily be easy because people tend to move in and out of the formal economy on several occasions during their working lives, and a net return rate on the individual account resources of 8.6 per cent, higher than the rates obtained during the first years of the system. Hence, the contribution period for many workers could in fact have to be longer in order to reach replacement rates similar to the ones offered by the pay-as-you-go system.

The non-contributory '*70 y Mas*' pension represents an additional benefit that did not exist in 1994. In that year, persons that were not eligible to a social insurance pension did not receive

any income support from the government. For the effects of this study, the employment profiles that would be eligible to the programme would be self-employed workers and workers employed in the informal economy. Whilst non-contributory pensions would represent an additional benefit introduced with the reforms for households of those employment profiles, two important differences with social insurance pensions should be highlighted. First, the retirement age was set at 70 years, whilst formal sector employees eligible to a pension could access an advanced pension at the age of 60.

Secondly, the amount of the non-contributory pension falls well below the amount levels of social insurance pensions. Figure 32 compares the replacement rates of the three types of pensions in 2012. As can be observed, the non-contributory pension would amount to only 27 per cent of one minimum wage and five per cent of the household's previous earnings, less than one fourth the rate of IMSS pensions for those income levels. Moreover, it should be expected that replacement rates of IMSS and ISSSTE pensions increase at least on a minimal degree as workers accumulate more resources in their individual accounts, augmenting the disparity with non-contributory pensions which are not tied to previous earnings.

**Figure 33. Social Insurance and Non-contributory Pensions' Replacement Rates, 2012 (% of previous earnings)**



Source: Own calculations.

To summarise this section, pension reform had differentiated effects across employment profiles and income levels. In the case of public sector employees covered by the IMSS or the ISSSTE, it appears to be that the reform would be beneficial for low income workers, because of increases to the minimum guaranteed pension. This is especially true for ISSSTE pensioners; for IMSS pensioners the minimum pension does register an increase in relation to the minimum wage but remained at the same amount in real terms. For other income levels the reforms would have a strong negative impact and even when the period of contributions to individual accounts is extended, amounts would hardly reach replacement rates similar to the rates offered by the pay-as-you-go system. It must be noted, however, that public sector employees were partially protected from the negative effects of the individual capitalisation system by the pension bonus paid by the state in recognition of the time contributed to the pay-as-you-go system.

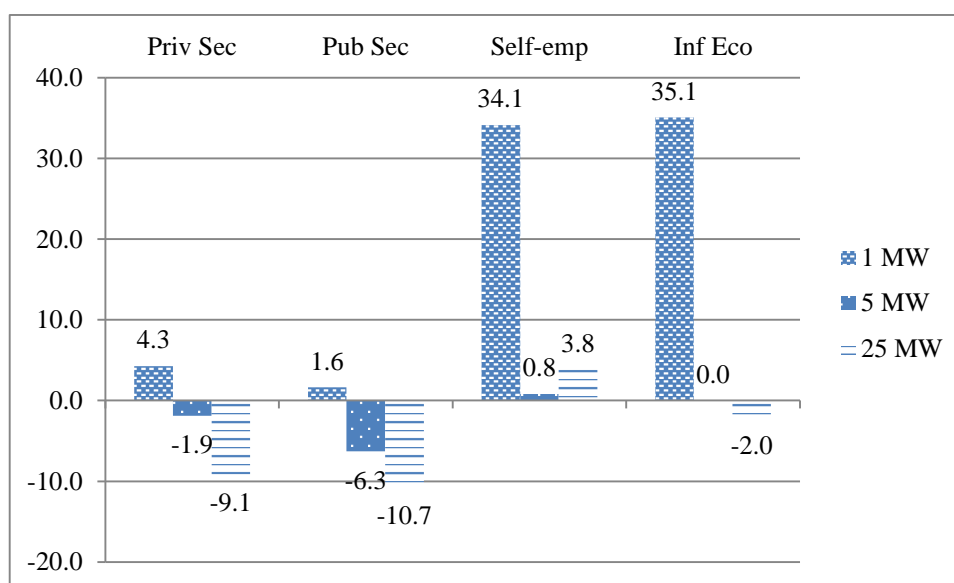
In the case of people not covered by social insurance, in 2012 non-contributory pensions would represent an additional source of support not offered by the state before the reform; however, a higher retirement age and much lower pension amounts would result in low levels of income protection for the elderly people covered and reinforce the pension system's fragmented and unequal nature.

## **6.5. Variations in Disposable Income after Taxes and Cash Benefits**

The combination of fiscal and social policy reforms seemed to have increased the levels of redistribution towards low income families, but with significant differences across employment profiles. Figure 33 compares the differences between the net cash gains or losses of 2012 and the net cash gains or losses of 1994, at three income levels and the four employment profiles. Family composition is the standard family of four members: one earner, a non-working spouse and two young children. As can be observed, at original earnings of one minimum wage, all employment profiles would obtain increases in the relative levels of support offered by the state, but families without social insurance coverage would register much higher increases. Families with earners formally employed would obtain modest increases mainly due to tax subsidies, which in practice constitute a cash benefit delivered through the tax system, but families that do not enjoy social insurance coverage would obtain gains of more than 30 percentage points in the proportion of disposable income in relation to their original income, due to *Oportunidades* benefits. One point that should be reiterated at

this point is that the system's rules do not explicitly exclude families of formal sector employees from *Oportunidades* coverage, however, the lack of social insurance is considered in three of the variables of the targeting methodology and the fact is that the large majority of *Oportunidades* beneficiaries are not covered by the social insurance system.

**Figure 34. 2012/1994 Difference in Disposable Income as a Percentage of Original Earnings (percentage points)**



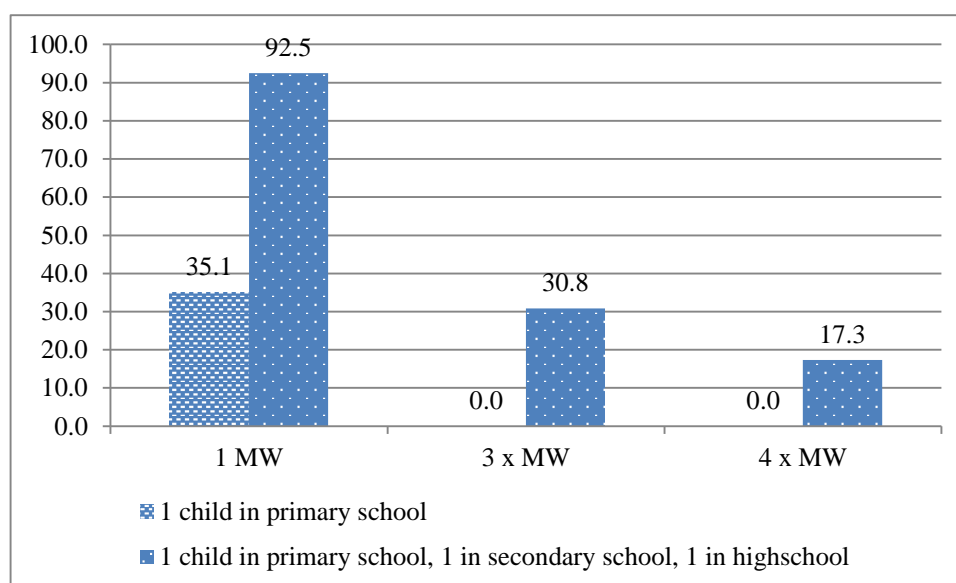
Source: Own calculations.

The strongest negative impact on disposable income as a percentage of the original, would be registered for families of formal sector employees, at five and 25 times the minimum wage. The main causes of the negative effects were higher income taxes and the absence of state cash support. Families of public sector employees would be most affected because on top of those two causes, their social insurance contributions were raised. On the other hand, families of self-employed workers would benefit from income tax reform if they are eligible to be classified as minor taxpayers. Families of workers in the informal economy earning 25 times the minimum wage also register a decrease in the indicator, but because in 2012 they would be paying Popular Health Insurance contributions to access healthcare.

Across household compositions, families that had children in higher school levels and were not covered by social insurance would be the most benefited by the policy changes, because of *Oportunidades* benefits. As already commented, the standard family composition of four

members with one child in primary school would stop receiving benefits at earnings of 2.5 times the minimum wage, but when the family had older children in school, benefits could continue until an earnings level of four times the minimum wage. In fact, according to the results of the calculations, the strongest redistributive effort would be directed towards these family types. Disposable income of social insurance beneficiary families would remain at the same levels for all compositions between the two years, but families of informal economy workers earning one minimum wage would obtain increases in their disposable income as a proportion of the original from 35 percentage points if they had one child in primary school, to 93 points with additional children in secondary and high school, and would still be expected to obtain increases up to an earnings level of four times the minimum wage. These variations are shown in Figure 34.

**Figure 35. 2012/1994 Difference in Disposable Income as a Percentage of the Original, Informal Workers (percentage points)**



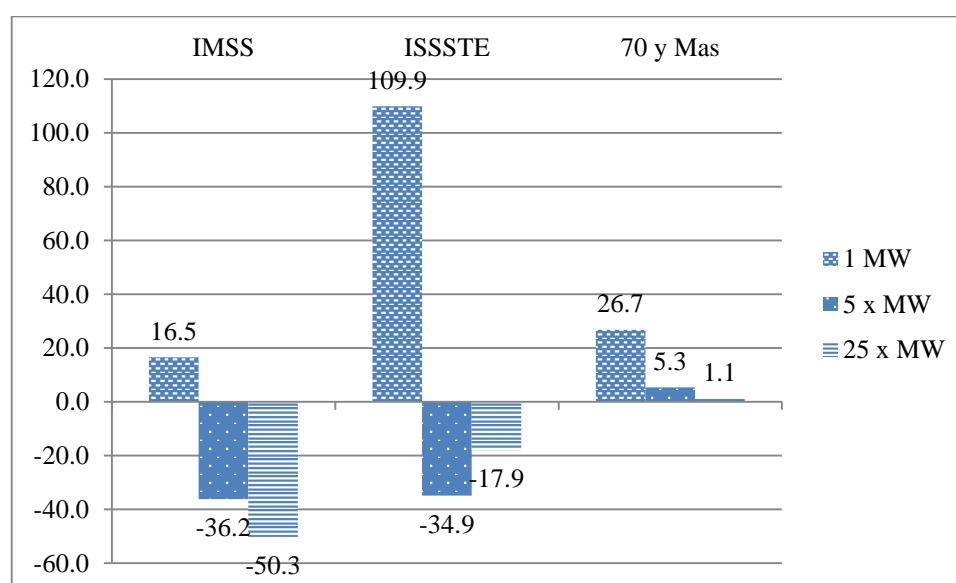
Source: Own calculations.

Low income households of pensioners previously employed in the public sector would be another type benefited by the reforms. As shown in Figure 35, disposable income as a percentage of the original would increase in more than 100 per cent at an earnings level of one minimum wage. The reason behind this result was the increase of the minimum guaranteed pension offered as a perk during the negotiation of the ISSSTE reform. Recipients of non-contributory pensions appear to have obtained important gains, but whilst the new



programme does provide income support they were not previously obtaining, the amounts were still well below the pensions paid to social insurance pensioners. Lastly, social insurance pensioners with previous earnings of five and 25 times the minimum wage would be expected to be major losers of the reform phase because of the systems' individual capitalisation.

**Figure 36. 2012/1994 Difference in Pensions' Replacement Rates (percentage points)**



Source: Own calculations.

In short, during the last two decades the redistributive effort has been directed towards low income families not covered by social insurance. On the other side, the heaviest burden seemed to have been put on middle and high income households of formal sector employees, who in 2012 were paying more taxes but not receiving any additional cash benefits.

## 6.6. Concluding Remarks

This chapter has presented the effects of cash benefits on disposable income. Results have shown that the combination of changes in taxes and benefits have made the system more redistributive. Low income families do seem to be getting more cash support from the state in 2012 than they were receiving in 1994. Still there are important variations across families of

different employment profile and composition. Two final points can be highlighted from these differences.

First, higher levels of redistribution have been mainly achieved not by extending or increasing benefit levels of already existing social programmes, but by introducing new programmes to offer some sort of protection to families previously excluded from social coverage. This expansion trend has generated a fragmented institutional architecture, with unconnected programmes that offer unequal levels of protection, in some cases against different contingencies, for distinct sectors of the population; hence reproducing to a large degree the fragmented development of Mexican social policy until the 1980s decade.

Secondly, large sectors of the population were still being excluded from receiving any type of benefits. The targeted nature of the new cash benefits meant that many families who still required support were being excluded the system's benefits. On top of that, one question that remains is to what extent were the policy changes and the introduction of new social programmes effective to combat poverty and inequality in Mexico. This and other questions will be addressed in chapter 8. In the meantime, the next chapter discusses the effects of healthcare, education, childcare and housing benefits.

## **7. Effects of Changes in Benefits In-Kind, Private Spending and Housing**

### **7.1. Introduction**

This chapter presents the calculations of benefits in kind, private healthcare and education spending and housing. The benefits in kind that were included in the study were healthcare, childcare and public education. All benefits' amounts were calculated using average per capita spending figures reported in official documents. The coverage by segment is the following:

- Healthcare services delivered to households of private sector employees by the IMSS and regulated by the Social Insurance Law (LSS), to households of public sector employees by the ISSSTE and regulated by the ISSSTE Law (LISSSTE), and to households with no social insurance coverage by the Secretariat for Health through Popular Health Insurance (SPS) and regulated by the General Health Law (LGS) and SPS Operation Rules.
- Childcare services are provided for households with women in work who have children up to four years old. Services for women who are in formally employment in the private sector are delivered by the IMSS and regulated by the LSS, for women employed in the public sector employees by the ISSSTE and regulated by the LISSSTE, and for women with no social insurance coverage by the Secretariat for Social Development (SEDESOL) and regulated by the specific programme's operation rules.
- Public education is universal and consists of three levels: six years of primary school, three years of secondary school and three years of high school. For the present study it was assumed that children of households above 10 times the minimum wage attended private education to reflect the reality of the country.

The effects of private spending are presented at two different moments, before benefits in kind to obtain cash disposable income and after benefits in kind to obtain final income. Private spending amounts were based on per capita spending figures obtained from official sources.

Regarding housing, the system is made up of the following elements:

- Formal sector employees covered by social insurance are eligible for mortgage loans to purchase, build or refurbish a house. In the case of private sector employees loans are delivered by the Workers' Housing National Fund Institute (INFONAVIT) and regulated by the INFONAVIT Law, and in the case of public sector employees by the ISSSTE's housing fund and regulated by the LISSSTE. Mortgage loans were estimated based on the cost of a new housing unit in a working class district of Mexico City, discounting the housing fund balance that workers would put as the down payment.
- Households not covered by social insurance can receive subsidies that mainly aim to support self-built housing solutions. There are several programmes at the Federal Level administered by the SEDESOL; the largest of one is the National Popular Housing Fund (FONHAPO), regulated by its own operation rules. Subsidies amounts were estimated based on the maximum amounts that FONHAPO offers.

The main indicator used for the analysis is disposable income expressed as a percentage of original income for each model household. Results are shown by employment status and relevant income levels. Household composition is especially relevant in the case of the calculations of childcare, because only households with women in work would be eligible. It is also important for the calculation of the two benefits in kind because the amount a household receive would increase with its size.

In the next section the value that healthcare, education and childcare would represent for each model household is added to disposable income; the following section adds the analysis of household welfare spending; the fourth section discusses housing; the fifth section compares the potential aggregated effects of all the components of the tax/benefit system and the last section of the chapter offers some concluding remarks.

## **7.2. Benefits In Kind**

### **7.2.1. Eligibility criteria and benefit amounts**

Healthcare and childcare are provided through social insurance and social assistance programmes. Social insurance is divided in programmes for private sector employees, i.e. the

IMSS system, and public sector employees, i.e. the ISSSTE system. Social assistance are provided by Federal Secretariats (or Ministries) for people that do not have social insurance coverage.

Table 24 displays the eligibility criteria and coverage percentages of healthcare and childcare programmes. The IMSS and the ISSSTE programmes are the oldest components of the healthcare system. IMSS healthcare covers active and retired formal private sector employees and their economic dependents; ISSSTE healthcare covers active and retired public sector employees and their economic dependents. Together these two institutes cover more than 50 per cent of the country's total population.

The main change of the reform process was the creation of Popular Health Insurance (SPS) in 2002. Before that year, the Federal Government, through the Secretariat of Health (SSA) did offer some healthcare to population with no social insurance but not as a right through services free at the point of service. No registry was kept, services were extremely limited and required the payment of a fee. With the creation of SPS health coverage was effectively expanded to uninsured population. As commented before, SPS is a voluntary insurance programme that offers primary, secondary and tertiary healthcare to families that register in it, although not all medical interventions are covered as in the cases of the IMSS and ISSSTE. The only requirement that must be fulfilled to join SPS is not to be covered by social insurance. Although its design intends to mirror an insurance programme, SPS functions as a social assistance programme although its targeting procedure is not carried out by limiting the supply of services, but rather through the contribution structure and the exemptions granted to low income families. In fact, its designers have claimed that the main objective they pursued with the creation SPS was to offer healthcare to the poor, not to universalise it (Frenk, 2005).

**Table 24. Characteristics of Healthcare and Childcare Programmes, 1994 and 2012**

Programme	Eligibility Criteria	Coverage (%)*	
		1994	2012
<b>Healthcare</b>		<b>49.1</b>	<b>104.9</b>
<b>IMSS</b>	<b>Private sector employees, pensioners and economic dependents</b>	<b>39.3</b>	<b>49.1</b>
<b>ISSSTE</b>	<b>Public sector employees, pensioners and economic dependents</b>	<b>9.8</b>	<b>10.6</b>
<b>Popular Health Insurance (SPS)</b>	<b>Families with no social insurance coverage</b>	<b>---</b>	<b>45.2</b>
<b>Childcare</b>		<b>0.9</b>	<b>6.0</b>
<b>IMSS</b>	<b>Children 0-4 years old of private sector women in work and divorced men</b>	<b>0.6</b>	<b>2.3</b>
<b>ISSSTE</b>	<b>Children 0-4 years old of public sector women in work and divorced men</b>	<b>0.3</b>	<b>0.4</b>
<b>SEDESOL</b>	<b>Children 0-4 years old of women in work and divorced men with no social insurance coverage</b>	<b>---</b>	<b>3.3</b>
	<b>Per capita monthly income &lt; Welfare line, (\$2,388, £211)</b>		

Source: Own calculation with data from Presidency (2013), CONAPO (2013)

\*Coverage of healthcare programmes refers to % of total population; coverage of childcare programmes refers to percentage of total children 0-4 years old in the country.

According to official data, with the introduction and expansion of SPS health care coverage reached, and surpassed, 100 per cent. Nonetheless, there are several caveats with that percentage. First, the IMSS does not report the real number of beneficiaries but rather an estimate based on the number of economic dependents per insured worker and pensioner. This is done because the institute lacks a national registry of beneficiaries. Secondly, the methodology to estimate the number of beneficiaries was modified in 2002, so 1994 and 2012 coverage levels are not strictly comparable (IMSS, 2010). Thirdly, SPS figures are not reliable because grave inconsistencies have been detected with its registry (Lakin, 2010). Ultimately, the percentages would refer to legal coverage but problems of access and quality of services persist, so even if a family is legally covered, it might not have access to or seek medical attention in the public system. Problems with access and quality are especially serious with SPS healthcare, because affiliation was rushed due to political reasons without guaranteeing the expansion of infrastructure and the adequate provision of services. Hence the existence of a large private sector, which represents close to half of all healthcare spending in the country (WB, 2013).

Childcare services are provided to children of women in work up to the age of four years. Like healthcare, the provision of childcare is partitioned in three segments. Since 1973, the LSS establishes that the IMSS must provide childcare to children of all women in work formally employed in the private sector. The LISSSTE establishes since its creation in 1960 that the ISSSTE must provide childcare to children of all public sector female employees. The main reform was the creation of social assistance services administered by the Secretariat for Social Development. Two criteria must be met to be eligible to these services. First, the worker should not be insured by social insurance. Secondly, per capita household income must fall below the welfare line, which in December 2012 amounted to \$2,388 (1.3 times the minimum wage, £211). As in the case of *Oportunidades*, household income is estimated using a survey that is applied to all women who apply for the programme.

Table 24 above shows the percentage of children registered in each segment out of the total number of children 0 to 4 years old in the country. Coverage of public childcare has increased significantly during the last two decades. Coverage of the ISSSTE has remained stable, but the IMSS system passed from covering 0.9 per cent of the age group on 1994 to 2.3 per cent in 2012. More importantly, SEDESOL childcare grew rapidly and reached 3.3 per cent in 2012.

Education is obligatory from pre-school until high school. Public education is universal, free and covers the majority of children in the country. Text books are also provided for free but families need to purchase other school material. Services are administered jointly by the Federal and State governments. Table 25 shows coverage by education level of children in the age group that corresponds to each level. Universal coverage in primary education was achieved several decades ago. Coverage levels are lower for the other levels but have grown significantly during the last decade. Most children attend public schools. The percentages of children in public education out of total enrolment are similar in 1994 and 2012: almost 94 per cent of all children in basic education, i.e. primary and secondary school, were enrolled in public schools. The percentages for high school are lower but they register an increase from 82 per cent in 1994 to 85 per cent in 2012. The majority of children who attend private education belong to families in the top income deciles (Esquivel et al., 2011).

**Table 25. Coverage of Education System**

Programme	2000s		2010s	
	Total <sup>a/</sup>	Public System <sup>b/</sup>	Total <sup>c/</sup>	Public System <sup>d/</sup>
Pre school	51.0		70.8	
Primary School	100.0	93.6	100.0	93.3
Secondary School	67.9		82.7	
High School	38.7	82.1	50.1	85.2

Source: INEE (2012), Presidency (2013)

a/ Data of 1999 except High School, which reports data from 2002.

b/ Data of 1994.

c/ Data of 2011.

d/ Data of 2012.

For the calculations of this study, the values of benefits in kind were established based on public per capita spending. Table 26 compares annual per capita spending on healthcare, education and childcare for 1994 and 2012. Spending on healthcare was estimated by dividing the total budget spent in each year by the number of persons who demanded medical attention from each institution. In 1994 the highest amounts were being spent on households insured by the IMSS, namely households with private sector employees. By 2012 the order had changed and ISSSTE beneficiaries were registering the highest amount; a change that reflects the negotiations that took place during the ISSSTE reform, when higher healthcare spending was offered to the trade unions in exchange of their approval. Nonetheless, as a result of the creation of SPS, the largest increase was registered for uninsured population, which in the case of this study would be households with earners who were self-employed or employed in the informal economy, for which spending was increased fivefold. One point to consider is that because of the fall real wages, amounts in 2012 seem to have a stronger impact; for example, in the case of IMSS beneficiaries even if the amount spent decreased in real terms, it represented in that year 0.22 of the annual minimum wage compared to 0.19 in 1994.



**Table 26. Annual Public Per Capita Spending on Healthcare, Education and Childcare Programmes, 1994 and 2012 (2012 pesos and pounds)**

Programme	1994			2012		
	\$	x MW	£	\$	x	£
<b>Healthcare</b>						
IMSS	5,625	0.19	497	4,921	0.22	434
ISSSTE	3,300	0.11	291	5,415	0.24	478
SSA / Popular Health Insurance	1,370	0.05	121	4,550	0.20	402
<b>Education</b>						
Basic (Primary and Secondary)	8,886	0.29	731	14,453	0.48	1,320
High School	19,124	0.63	1,688	19,102	0.63	1,686
<b>Childcare</b>						
IMSS	65,453	2.16	5,779	51,442	2.26	4,542
ISSSTE	42,301	1.40	3,735	34,971	1.25	3,088
SEDESOL	---	---	---	10,620	0.47	570

Source: Presidency (2013), (IMSS, 2013a), ISSSTE (2013)

Per capita spending on public education was obtained by dividing total expenditure by the number of enrolled students in each level. Basic education includes six years of primary school and three years of secondary school. A child would normally enter primary school at six years of age and leave secondary school at 15. High school consists of three years, normally from the age of 15 until 18. Public spending in basic education increased significantly between 1994 and 2012; measured in times the minimum wage, the value of one child in public education rose from 30 per cent of one annual minimum wage to almost half. The value of high school education remained stable.

Per capita spending on childcare was obtained by dividing the amount spent by the number of children registered in each network. There is a great disparity between the amounts spent by institution. Whilst in the case of children of women formally employed in the private sector the value of childcare would amount to more than two annual minimum wages, the targeted social assistance services of the SEDESOL would represent less than half a minimum wage. The value of IMSS and ISSSTE childcare appears to fall in 2012 compared to 1994 because of the increasing outsourcing of services to private providers, which results in lower operational costs. SEDESOL also outsources its services to private providers, but under different conditions. Centres are expected to be of less capacity and requirements set for the

private provider are less strict. The differences in the outsourcing processes are reflected in the fees per registered child paid to private providers; in the Federal District the IMSS pays a monthly fee of \$2,300 (£203) per child and the SEDESOL of \$700 (£62).

### **7.2.2. Assumptions for the calculation of benefits in kind**

The following assumptions were made for the calculations of the effects of the values of benefits in kind:

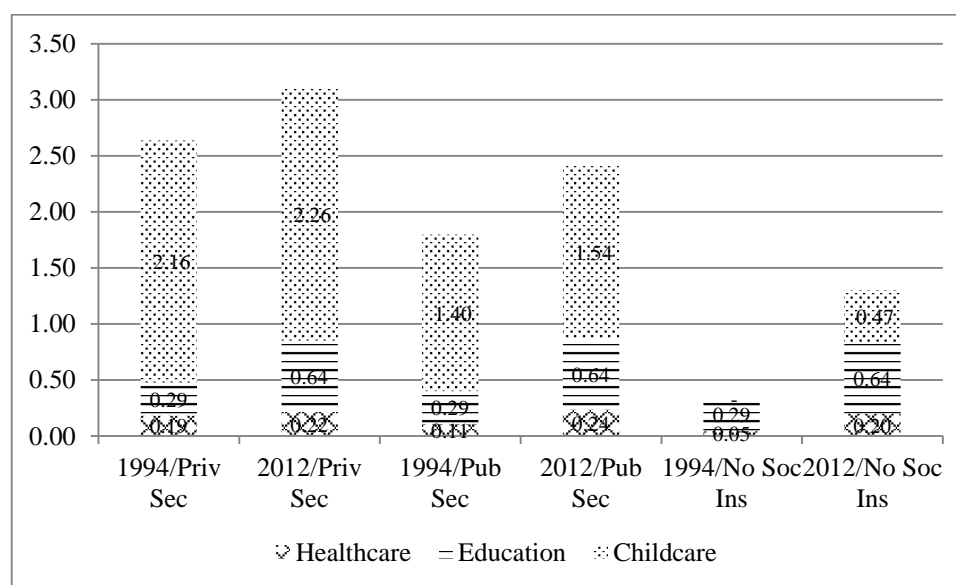
- Employment status, income level and household composition did not change during the year.
- Healthcare per capita spending was assumed to be equal for all household members.
- Healthcare per capita spending by employment status was assumed to be the same for all income levels.
- Household composition for healthcare was a couple with two children.
- Education was calculated for households up to 10 times the minimum wage to reflect enrolment rates in public education up to the ninth income decile.
- Household compositions for education were a couple with one child in basic education and a couple with one child in high school.
- Childcare was calculated for households of women in work with one child born during the second month of 1994 and 2012.
- The value of childcare was estimated for nine months considering that the first three months of each year the women were in maternity leave.
- The eligibility to social assistance childcare was determined from the income after contributions and taxes and before government transfers.
- Per capita household income to establish eligibility to social assistance childcare was estimated by applying economies of scale and scale equivalences, taken from official data published by the National Commission for the Evaluation of Social Policy (CONEVAL, 2011): 0.70 for members 0-5 years, 0.74 for members 6-12 years, 0.71 for members 13-18 years and 0.99 for members above 19 years.

### **7.2.3. Effects of benefits in kind**

Figure 36 shows the value of benefits in kind by employment status. The value is expressed as the percentage that per capita spending represented of one minimum wage in 1994 and

2012. For example, in 1994 the annual value of childcare for a women in work who was employed in the private sector represented 2.16 times the annual minimum wage, and in 2012 2.26 times. Households with private sector employees would receive IMSS healthcare, education and if a member was a woman in work with a child younger than four years old, IMSS childcare. Households with public sector employees would receive ISSSTE healthcare, education and if one member was a woman in work with a child younger than four years old, ISSSTE childcare. Households with self-employed earners or with earners employed in the informal economy would receive SSA/SPS healthcare, education and if one member was a woman in work with a child younger than four years old and the means-test was passed, SEDESOL childcare.

**Figure 37. Annual Value of Benefits-Kind, Private Sector Employees, Public Sector Employees and Families without Social Insurance Coverage, 1994 and 2012 (times the annual minimum wage)**



Source: Own calculations.

The value of benefits in kind should be expected to have increased for all employment status, albeit in different degrees. Childcare would be the service with the highest value for all employment status, but except for households with no social insurance, education registers the highest increase. Healthcare seems to lag behind, with much lower spending levels and only slight increments during the last 18 years; although with the creation of SPS the inequalities in the distribution of resources between insured and uninsured households seem to have diminished.

The total value of benefits for households of private sector employees would register the lower increase compared to the other employment status, from 2.64 times the minimum wage in 1994 to 3.11 per cent in 2012, representing an increase of 0.47 percentage points. Nonetheless, this group remains as the most benefited by the three services. The service with the strongest impact would be education, which increased in 0.34 times the minimum wage, whilst healthcare and childcare were kept at stable levels with lower increments.

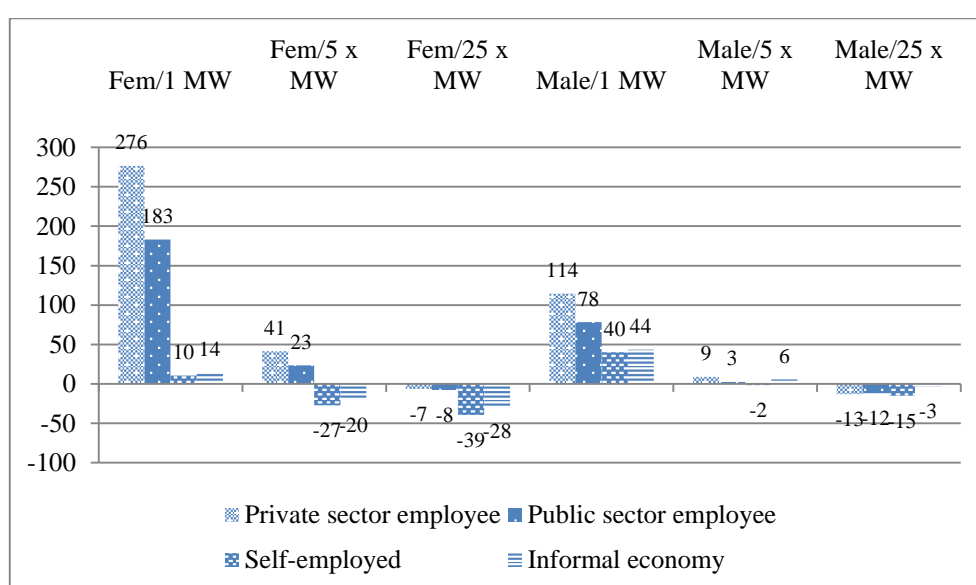
The total value of benefits for households of public sector employees would register a larger increase, from 1.80 per cent to 2.40 times the minimum wage of 1994 and 2012, respectively. As for private sector employees' households, education would be the service with the strongest impact, but healthcare and childcare would both register important increments.

Households with no social insurance coverage, namely with earners who are self-employed or employed in the informal economy, would be the most favoured by the changes in benefits in kind. In 1994 the total value of the benefits provided to these groups would have represented 0.36 annual minimum wages, with little resources spent on healthcare and no childcare. By 2012, the value of the three services would amount to 1.31 per cent of the minimum wage, an increase of 0.96 points. The value of healthcare would rise from 0.5 minimum wages to 0.20 and childcare would amount to 0.47 of a minimum wage. Nonetheless, despite these important increases, the resources devoted to these households would still be considerably lower than the resources spent on services for households of the other two employment status. In addition, the targeted design of the services mean that the households that contribute to fund SPS must do it at higher levels than the households covered by social insurance and only poor households would be entitled to childcare.

The value of benefits in kind would be expected to raise the income of all households, although they would have a higher impact on those of lower earnings. Figures 37 and 38 below compare the 1994 and 2012 variations in household income as a percentage of the original, after taxes, cash benefits and the value of benefits in kind, for two household compositions at three income levels. The composition shown on the left side of each graph consists of a female head in work and two young children, one newly born and one in primary school age. The composition on the right consists of a male head, a spouse not working and also two children, one newly born and one in primary school.

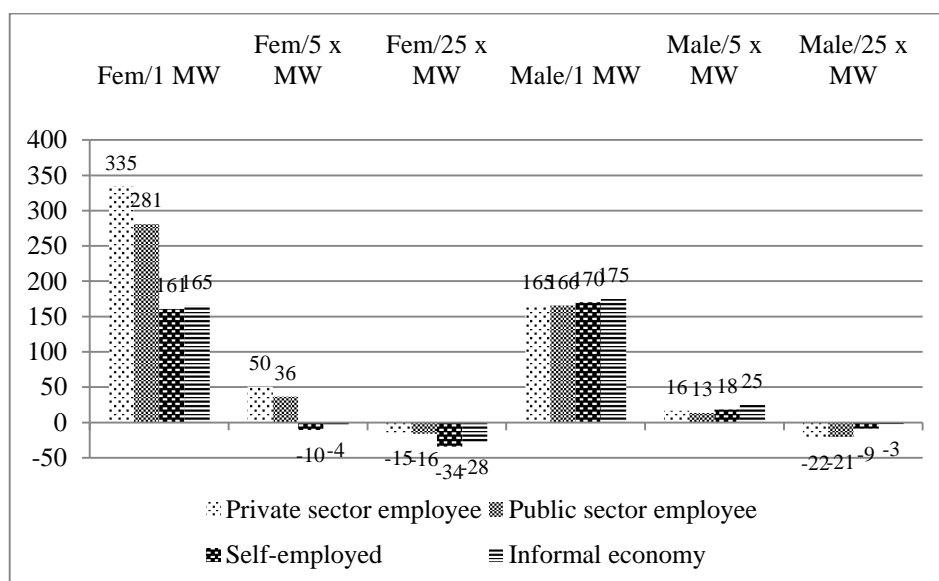
As can be observed in the first graph, in 1994 the benefits of the system were concentrated on low income households with social insurance coverage, especially on female headed households due to the high value of childcare. Of these, households of private sector employees covered by the IMSS would receive superior levels of support compared to public sector employees covered by the ISSSTE. Little support was offered to households that lacked social insurance coverage. Female headed households with no social insurance would in fact be the worse off at all income levels households because they would lose 90 days of income due to the period of maternity incapacity. These calculations highlight the importance of childcare and maternity benefits for women in work.

**Figure 38. Variation between Final Income after Benefits In-Kind and Original Earnings, Female and Male Headed Households, 4 Employment Profiles, 1994, (% of original earnings)**



Source: Own calculations.

**Figure 39. Variation between Final Income after Benefits In-Kind and Original Earnings, Female and Male Headed Households, 4 Employment Profiles, 2012 (% of original earnings)**



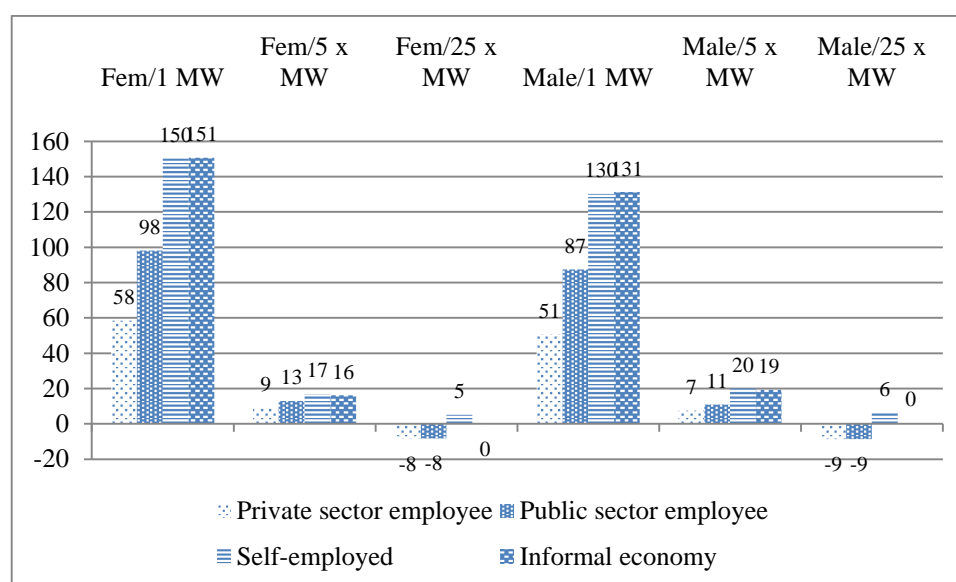
Source: Own calculations.

In 2012, all low and middle income households would have higher incomes than in 1994, but it is households with no social insurance coverage the ones that would obtain the major improvements. In fact, at original earnings of one minimum wage, income of male headed uninsured households would be slightly higher than income of insured households, due to the new social assistance cash benefits and healthcare programmes; at the same earnings level, among female headed households, insured households would obtain higher incomes than uninsured households mainly due to the differences in the value of childcare offered by IMSS, ISSSTE and SEDESOL.

To better illustrate the potential effects of the changes in benefits in kind, Figure 39 presents the differences between the 1994 and 2012 incomes of each model household. Incomes include taxes, cash benefits and benefits in kind. According to the calculations, the households that would be the winners of the reforms would be those at the lowest income level with no access to social insurance. Households with female heads at that earnings level would have seen their income increase in around 150 percentage points for both households and households with male heads in 131 points. The households that would follow would be households of public sector employees at the same earnings level, because in spite of the increase of their social insurance contributions which has heavily detrimental, they would in

return receive benefits in kind of higher value than the benefits offered to households of public sector waged workers by the IMSS.

**Figure 40. 2012/1994 Difference in Final Income after Benefits In-Kind, Female and Male Headed Households, 4 Employment profiles (percentage points)**



Source: Own calculations.

At earnings of five times the minimum wage, income would be expected to increase between eight and 20 percentage points for all households. Even if at this income level eligibility to social assistance benefits would be lost, households with no social insurance coverage still show important increments because of the introduction of SPS healthcare; whilst households of public sector workers would also be benefited by higher spending on healthcare, reverting the loss they would suffer in income before benefits in kind. At 25 times the minimum wage the effects are similar and increases on healthcare would impact positively households with uninsured earners and of public sector employees.

In conclusion, the changes in benefits in kind would be expected to mostly favour households with no social insurance coverage, especially households at the lowest end of the income scale because of the introduction of income tested social assistance benefits. Among households of waged workers with access to social insurance, those with public sector employees would have resulted more benefited than households with private sector employees. Across households of different compositions, childcare would represent the

benefit of the highest value for households with female heads. The next section analyses trends and effects of private healthcare and education spending.

### **7.3. Private Welfare Spending**

This section calculates the effects that private spending on healthcare and education services could be expected to have in 1994 and 2012. The cost of childcare is not included because the number of households that use private childcare remains minimal; according to the employment and social security national surveys 0.03 per cent in 1996 and 1.1 per cent in 2013 of the total number of children below six years old (Presidency, 2013, CONAPO, 2013). This is important because deductions on these spending concepts have already been discounted from income tax.

#### **7.3.1. Private Spending Amounts**

The calculation of private spending on welfare services poses some challenges. Private spending on welfare services varies significantly across income levels, hence assuming a spending package for all model households, as has been done in other studies that apply the model families approach, would distort results. The alternative taken regarding healthcare spending was to use average household spending reported in income and expenditures surveys. Regarding education spending, it was assumed that children of families with earnings up to 15 times the minimum wage were attending public schools and hence were not registering any spending on that concept.

Private spending on healthcare fell from 58 per cent of total healthcare spending in 1994 to 48 per cent in 2012 (WB, 2013). At the household level, average spending on healthcare decreased from 2.7 per cent of total spending in 1994 to 1.9 per cent in 2012, and from 2.4 per cent of income to 1.7 per cent. Table 27 shows the annual per capita amounts in private healthcare services.

For the households that sent their children to private school, the cost considered for the study was the annual average tuition fees of Mexico City private schools in 2012, reported in a study published by the national teacher's union (SNTE, 2013); no data was found on private school tuition fees for 1994, so the same amount was used for the calculations. The amounts are shown in the Table 27.



**Table 27. Annual Per Capita Amounts of Private Spending on Healthcare and Education (2012 pesos/pounds)**

Programme	1994			2012		
	\$	x MW	£	\$	x MW	£
Healthcare	908	0.03	80	686	0.03	61
Education	12,800	0.42	1,130	12,800	0.56	1,130

Source: ENIGH (2012), SNTE (2013).

### 7.3.2. Assumptions for the calculation of private spending

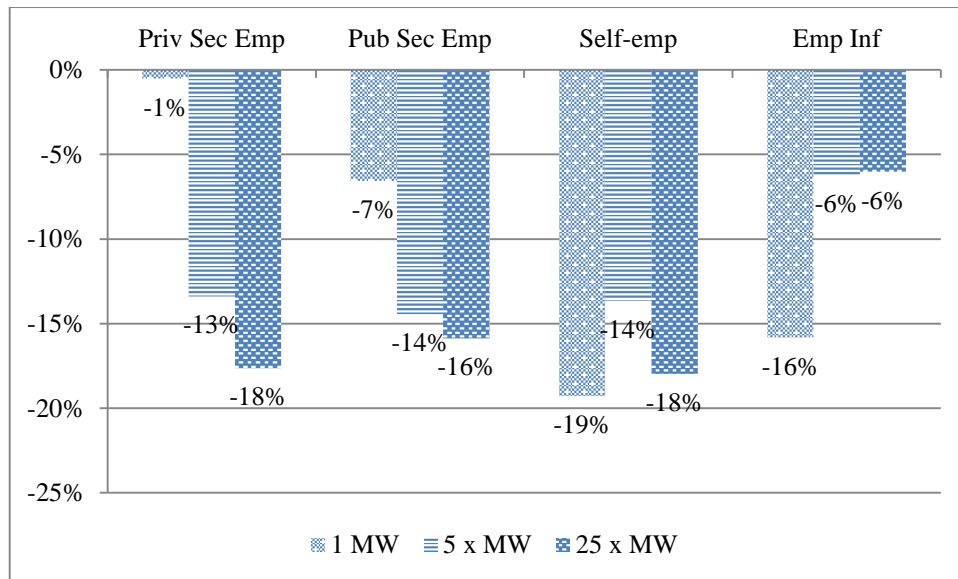
The following assumptions that were made for the calculations of private welfare spending:

- Healthcare spending was calculated for all families at the per capita amounts.
- Education spending was calculated for families with original earnings of 15 times the minimum wage and above.
- No data was found on private school tuition fees for 1994, so the same amounts were used for both years.

### 7.3.3. Effects of Private Spending

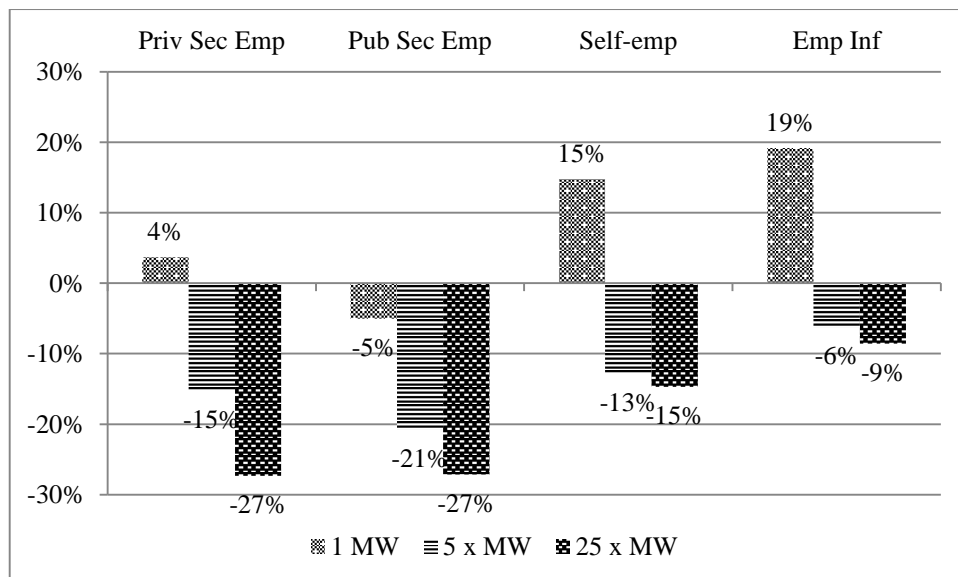
Figures 40 and 41 compare disposable income after contributions and taxes, cash benefits and private spending as a proportion of original income for 1994 and 2012. The family composition is a male breadwinner, his spouse and two young children, one newly born and one in primary school. The calculations do not include benefits in-kind, so the graphs illustrate the actual cash income that families would be expected to obtain.

**Figure 41. Variation between Disposable Income after Private Spending and Original Earnings, 4 Employment Profiles, 1994 (% of original earnings)**



Source: Own calculations.

**Figure 42. Variation between Disposable Income after Private Spending and Original Earnings, 4 Employment Profiles, 2012 (% of original earnings)**



Source: Own calculations.

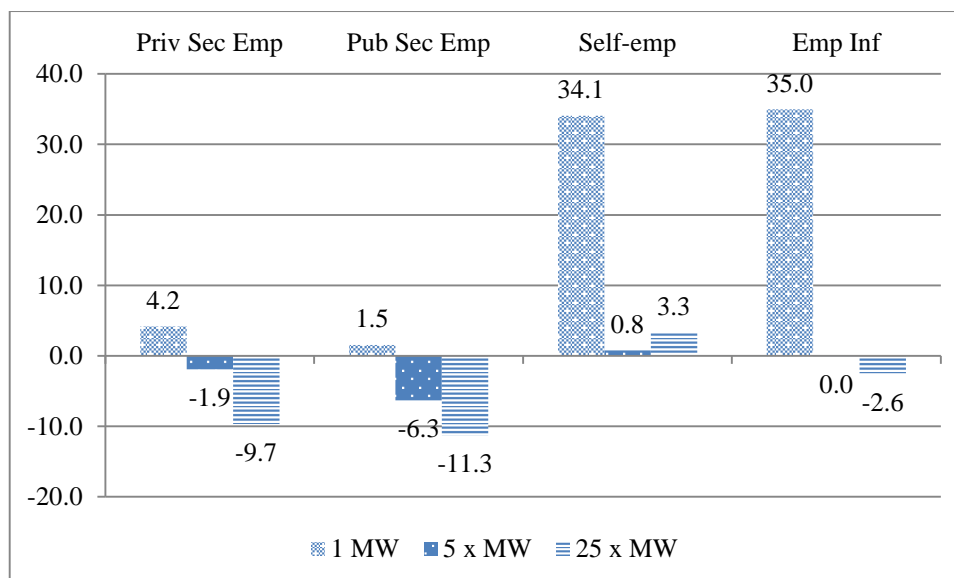
In 1994, private welfare spending as calculated in this study would push cash disposable income of all families below the original. Whilst before spending, low income households of

private and public sector would register an income above the original, mainly due to income tax subsidies, healthcare spending would decrease their income in 12 percentage points. In the case of low earnings families with no social insurance, their income after spending would fall more than 15 points. Hence, in that year after subtracting private welfare spending, the state was not offering to any family sufficient support to raise its earnings above the original.

The situation changes for 2012 with low income families with no social insurance coverage being the most benefited by changes in the system. Private healthcare spending would still affect in 12 points the disposable income of all families with original earnings of one minimum wage, but the benefits offered by the system would offset that reduction for three employment status. In the case of families with earners employed in the formal private sector, the changes that would raise disposable income above the original are delivered in the form of higher amounts of tax subsidies. Nonetheless, the families that register the higher levels of disposable income in proportion to the original are those with no social insurance coverage, 15 per cent in the case of families with self-employed earners and 19 per cent in the case of families with earners employed in the informal economy, due to the introduction of social assistance cash benefits and 19 per cent in the case of families with earners. Disposable income would still be raised above the original after private spending for these employment status at twice the minimum wage, but after that earnings level when eligibility to social assistance benefits were lost, cash income would drop below original earnings original.

To better illustrate the effects of the policy changes after private spending, figure 42 compares the differences in the 1994 and 2012 cash disposable incomes. As can be observed, low earnings families of all employment status appear to be the most favoured by the reforms, whilst families at the top of the income scale would register the highest negative variations.

**Figure 43. 2012/1994 Difference in Disposable Income after Private Spending, 4 Employment Profiles, (percentage points)**



Source: Own calculations.

Among the families with original earnings of one minimum wage, those that lack social insurance coverage and that would receive social assistance benefits, register increments of more than 30 percentage points in their disposable income. Low earnings families covered by social insurance would obtain much lower increments, 4.2 points in the case of a family with an earner employed in the private sector and 1.5 points in the case of the family with an earner employed in the public sector.

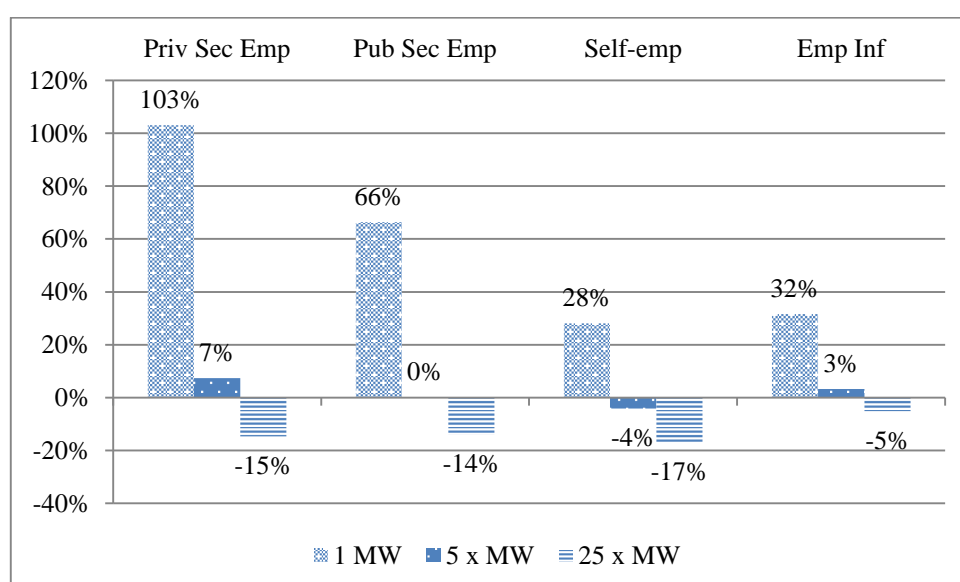
The situation changes for family models of low earnings but higher than one minimum wage. When families with no social insurance coverage lose eligibility to social assistance benefits at 2.5 times the minimum wage, they would remain in the same condition as they were in 1994; but due to income tax changes, families of private sector employees would register positive variations until reaching an earnings level of four times the minimum wage. The worse off of all these group of family models would be the ones with public sector employees, because higher social insurance contributions mean that their 2012 cash income would be less than in 1994 from an earnings level of twice the minimum wage.

All the results discussed above correspond to families with one male earner, the spouse and two children, however, as discussed in the previously, household composition would modify

the levels of cash support for social assistance beneficiaries in 2012. Families with more and older children would continue receiving social assistance benefits until higher earnings level and as a result, for example, even after subtracting private spending, families of earners employed in the informal economy would obtain a disposable income above the original until an earnings level of three times the minimum wage. On the other hand, subtracting private spending would push disposable income even lower for families headed by women, already severely affected by the lack of social insurance coverage during their maternity period.

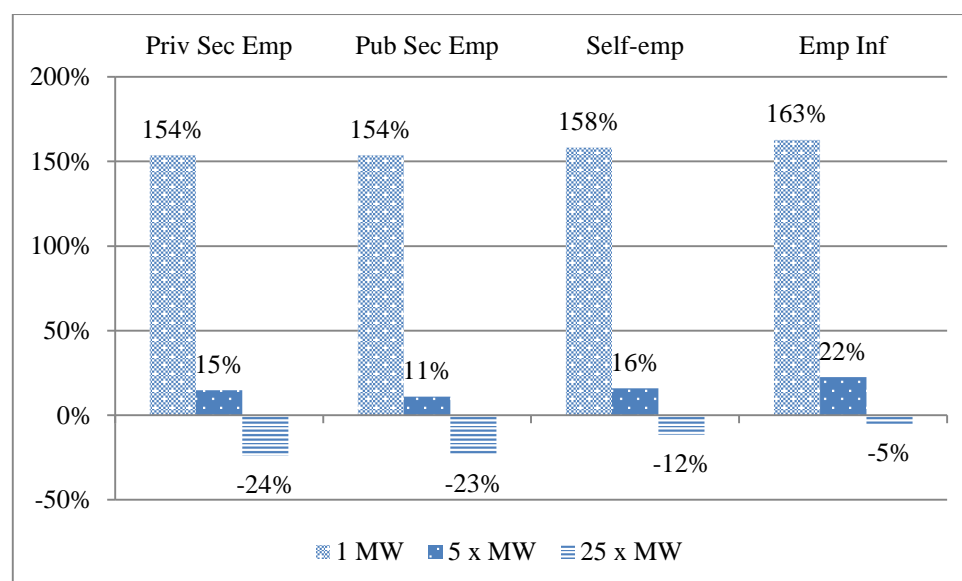
As explained before, the value of benefits in kind would level the effects of the changes for all employment status. Figures 43 and 44 show final income as a percentage of original income, after subtracting private spending and adding the value of benefits in kind. The family composition remains the same as the one shown in the previous figures: the couple with a male earner and two children, one of them in primary school. After private spending, in 1994 benefits in kind would still have pushed income of low earnings families above the original, with a much stronger effect on families with access to social insurance because of higher levels of per capita spending, but at five times the minimum wage income would have fallen to levels close or below the original for all employment status.

**Figure 44. Variation between Final Income after Private Spending and Original Earnings, 4 Employment Profiles, 1994 (% of original earnings)**



Source: Own calculations.

**Figure 45. Variation between Final Income after Private Spending and Original Earnings, 4 Employment Profiles, 2012 (% of original earnings)**

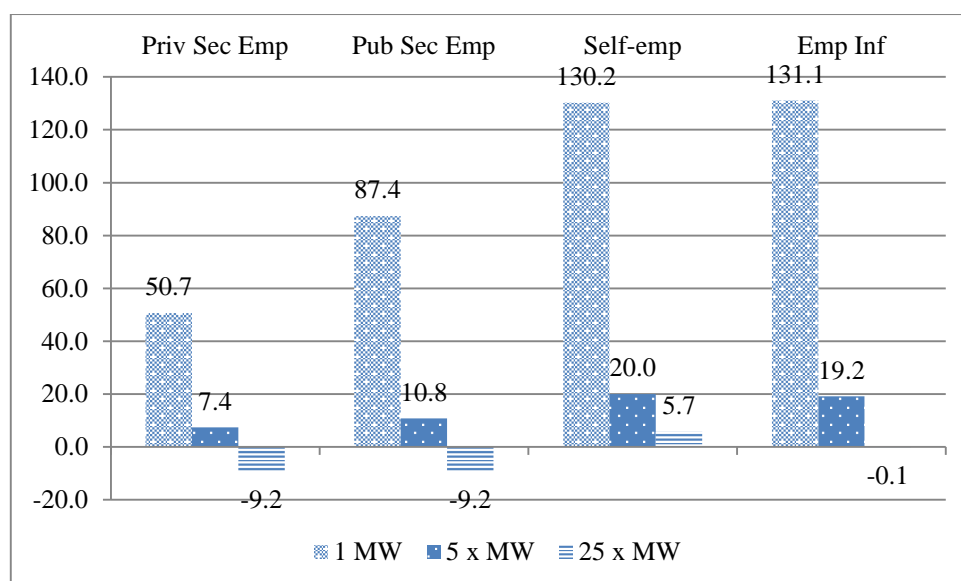


Source: Own calculations.

In 2012, however, the value of benefits in kind would increase income of all employment status to more than 150 per cent of the original. As commented previously in this chapter, the main difference would be that families covered by social insurance would receive little cash support but higher spending on benefits in kind, while for families receiving social assistance benefits the composition of the benefit package would be the opposite, larger proportion of cash benefits but lower share of public spending on welfare services.

Figure 45 shows the variation in final income as a proportion of the original, including taxes, benefits and private spending. As can be observed, the reforms largely benefited low earnings families with no social insurance coverage. At a level of one minimum wage, after private spending, their income would still rise in more than 130 percentage points for both families with a self-employed earner and with the earner employed in the informal economy. On the other extreme, top income families of earners employed in the formal economy would in fact constitute the only ones of the family models shown in the graph with a final income lower in 2012 than in 1994.

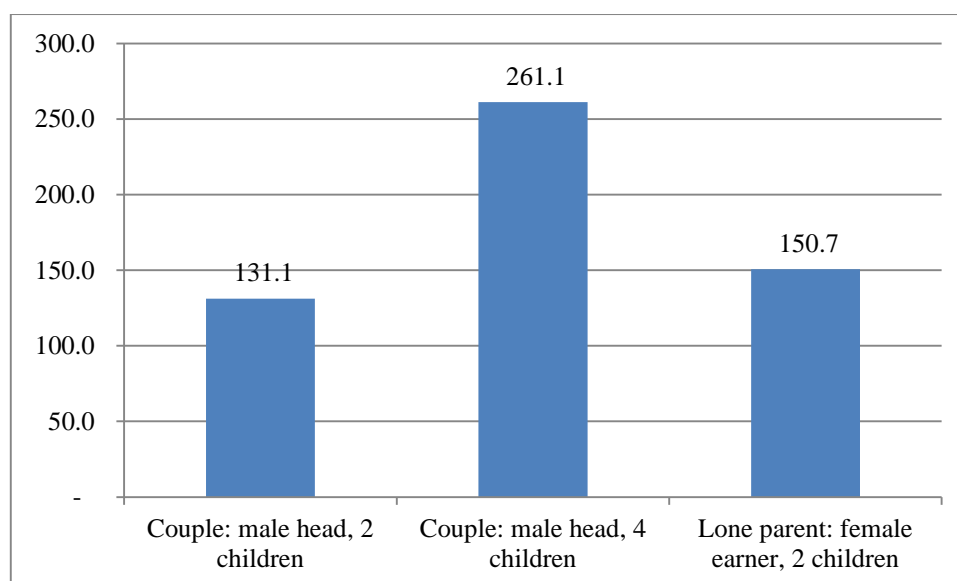
**Figure 46. 2012/1994 Difference in Final Income after Private Spending, 4 Employment Profiles (percentage points)**



Source: Own calculations.

When comparing across family compositions, those of larger size, with older children or with women in work not covered by social insurance would be the most benefited by the policy changes. Figure 46 compares 2012-1994 variations in final income as a proportion of the original for families with earners employed in the informal economy and original income of one minimum wage. The figure shows the indicator for three family compositions. Of all the family models included in the study, these would be the ones that register the highest variations.

**Figure 47. 2012/1994 Difference in Final Income, Informal Workers  
(percentage points)**



Source: Own calculations.

As can be observed the couple with four children, one in each school level, would obtain a final income of more than 250 points higher in 2012 than in 1994, due to much higher *Oportunidades* and higher per capita spending on healthcare, namely the Popular Health Insurance. For a household headed by women the reforms would increase its final income in more than 150 percentage points due basically to the introduction of childcare services.

The numbers are close to those of households with self-employed earners because even if they would be paying income tax, the amounts would be offset by much higher benefit levels. Up to this point of the analysis, low income households with no social insurance would be the ones that appear to be the most benefited by the reforms.

#### **7.4. The Effects of Changes in Housing Programmes**

Housing programmes occupy a central space in Mexican social policy. Since the 1970s, the state has been strongly active in the area, mainly offering loans and subsidies for the construction, purchasing and refurbishing of homes. In 2011, spending on housing represented 14 per cent of total social spending, a much higher percentage than any other



major Latin American country (CEPAL, 2013). Contrary to many European countries, the state does not provide benefits to help with the payment of rents.

Home ownership is the most common type of tenure in Mexico. In 2010, almost 80 per cent of homes were inhabited by their owners. Two processes had an impact on the high rate of homeownership. On one side, intense rural-urban migration during the period 1950-1990 and the settlement of migrants in irregular land in big cities' peripheries, where they commonly obtained land titles through clientelistic negotiations with the political regime. On the other side, since the 1970s the promotion of home ownership through public policy (Velazquez Leyer, 2015). Additionally, as it happened in other semi-peripheral countries (Papadopoulos and Roumpakis, 2013), home ownership acquired a high value as a source of welfare in the absence of a comprehensive welfare state, and families and individuals prioritised the purchasing homes (Velazquez Leyer, 2015).

As it happened in other policy areas, state intervention in the area has also been historically fragmented across labour market segments. In 1972, when the expansion of the social protection system was attempted through the social insurance system, one of the most important reforms was the creation of the National Worker's Housing Fund (INFONAVIT), to offer soft loans to formal private sector employees, namely the same beneficiaries of the IMSS system, funded by a payroll tax of five per cent of wage paid by employers. In that same year, a similar programme called the ISSSTE Housing Fund (FOVISSSTE) was created to provide loans to public sector employees, also funded with a contribution of five per cent of wage, paid by the government since it is the employer. Programmes to provide subsidies to families with no social insurance coverage mainly aimed at self-built solutions have also existed since then, notably the Popular Housing Fund (FONHAPO), created in the 1980s, virtually cancelled in the 1990s, but revamped in 2003 (Velazquez Leyer, 2015).

#### **7.4.1. Eligibility Criteria and Benefit Amounts**

The INFONAVIT and FOVISSSTE operate as systems of individual accounts, where employers' contributions are deposited. These programmes were not reformed in a significant way during the period covered in this thesis. On the other hand, programmes of subsidies for families with no social insurance were expanded since the early 2000s. Each of these programmes offers different schemes; table 28 compares the architecture of the principal schemes of each programme in 2012. Maximum loan amounts for INFONAVIT and

FOVISSSTE refer to the amount that the agency will lend; workers can use their individual account balance as the down payment or to cover the price. In addition to the interest rates that INFONAVIT and FOVISSSE beneficiaries pay, the balance is increases at the end of each year at the same rate of the minimum wage. The legislation establishes that the annual interest that these agencies must pay on individual account balances must be higher than the annual increase of the minimum wage; in 2012 the interest rate amounted to 2 percentage points above the increase of 4.2 per cent of the minimum wage.

**Table 28. Characteristics of Housing Programmes, 2012**

Programme	Benefit	Eligibility Criteria	Maximum Amount	Annual Interest Rate	Loans in 2012
INFONAVIT	Mortgage loans	1 year of contributions  Points system based on age, contribution time and individual account balance	\$482,700 (£42,170)	1 MW – 4%  5 x MW – 9%  25 x MW – 10%  + Balance increases with MW	530,000
FOVISSSTE	Mortgages loans	18 months of contributions  No previous loans  Lottery system	\$869,900 (£76,700)	1 MW – 4%  5 x MW – 6%  25 x MW – 6%  + Balance increases with MW	64,000
FONHAPO	Subsidies	Families under the patrimony poverty line	\$106,000 (£9,350)	Conditional on recipient's contribution of \$10,600 (£935)	330,000 <sup>1/</sup>

1/ Includes CONAVI programme, operated by the same government agency.

Sources: INFONAVIT ((LINFONAVIT, 1992), (LISSSTE, 2007), (FONHAPO, 2010), (Presidency, 2013)

As can be observed, there are important differences in the characteristics of each programme. Public sector workers would receive the loans of the highest amounts, and interest rates would be lower than INFONAVIT rates for middle and high income workers, although they would be expected to contribute for a longer period and the loans are assigned on a lottery basis. The maximum amount of a FONHAPO subsidy amounts are much lower than INFONAVIT and FOVISSSTE loans, but they would only need to contribute with \$10,600.

### 7.4.2. Assumptions for the Calculation of Housing Loans

The calculations were carried out for 2012. The assumptions were the following:

- Workers met all the criteria to be eligible to the loans or subsidies.
- Results are presented at three income levels: one minimum wage, five times the minimum wage and 25 times the minimum wage.
- Individual account balances were calculated assuming that workers contributed to the system since 1992, the year when they were created, and an annual interest rate of 2 percentage points above the minimum wage, as in 2012.
- The loan or subsidy was provided at the beginning of each year.
- Loans were obtained for the purchase of a new home with a value of \$275,000 (£24,250), the average price of a home in a working class neighbourhood (SHF/CIDOC, 2012).

### 7.4.3. Effects of Housing Loans and Subsidies

Table 29 shows the balances that INFONAVIT and FOVISSSTE beneficiaries would have in their individual accounts at the end of 2011, and the remaining amounts they would have to borrow from the institutions to buy a home of \$275,000. Low income workers would have to borrow the largest amounts, whilst workers with original earnings of 25 times the minimum wage would not have to borrow anything.

**Table 29. Estimated Balances of INFONAVIT and FOVISSSTE Individual Accounts, December 2011**

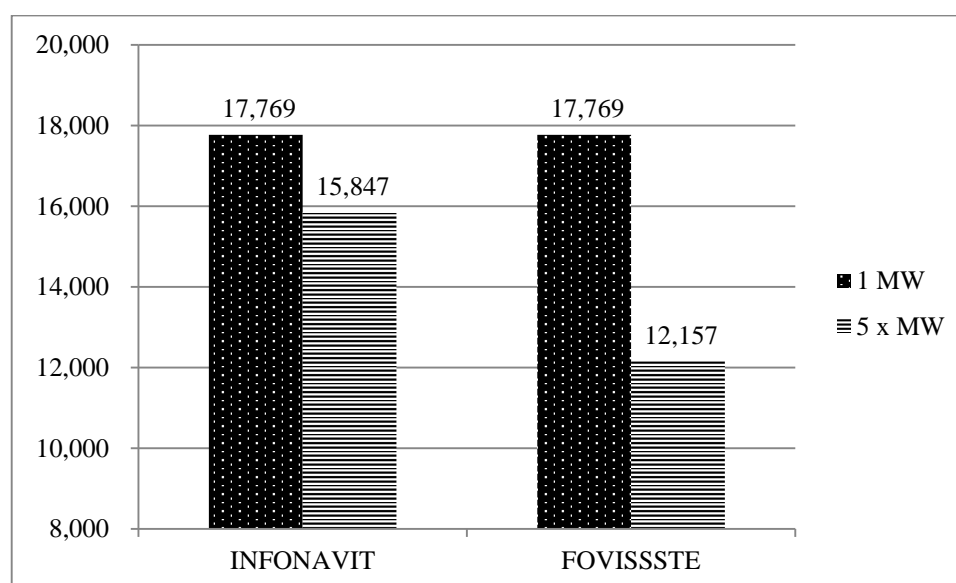
Income Level	Balance		Loan	
	\$ MX	£ GB	\$ MX	£ GB
1 MW	28,000	2,449	246,800	21,760
5 x MW	141,000	12,433	133,900	11,800
25 x MW	706,000	62,257	---	---

Source: Own calculations.

INFONAVIT workers would pay an annual rate of four per cent at one minimum wage and nine per cent at five times the minimum wage; for FOVISSSTE workers the rate would be the same at one minimum wage but six per cent at five times the minimum wage. Figure 47 compares the total amount that each worker would pay for the 12 months of 2012, assuming

that the loan had been granted for a period of 30 years. Workers with original earnings of five times the minimum wage would pay less even if their interest rates are higher because they would borrow lower amounts. At one minimum wage workers affiliated to both institutions would have to pay the same amount, \$17,769 (£1,569), but at five times the minimum wage, public sector workers would enjoy more favourable conditions, paying only \$12,157 (£1,072), compared to \$15,847 (£1,397) that INFONAVIT affiliates would have to pay.

**Figure 48. Annual Payments of Mortgage Loans, Formal Sector Employees, 2012 (pesos)**



Source: Own calculations.

Low income workers would not be able to buy a home at the price assumed for this study. The payment of the instalments would represent 78 per cent of the original earnings of both INFONAVIT and FOVISSSTE affiliates, and 67 per cent of the disposable cash income of the former and 73 per cent of the latter. At five times the minimum wage, the percentages of original earnings would be 14 per cent for INFONAVIT affiliates and 11 per cent for FOVISSSTE ones, and of cash earnings, 16 per cent for the former and 13 per cent for the latter.

Workers with no social insurance coverage could only receive subsidies if their cash income excluding benefits fell below the patrimony poverty line. This line corresponds to a previous poverty measurement methodology, but the CONEVAL still reports it and the operation rules of the FONHAPO programme have kept it. At the end of 2012 this line was set at \$2,441

(£215) per capita, which means that a family of four members with two young children should have to have had an income of less than four times the minimum wage to be eligible. However, these families would only receive \$106,000, well below the price of the home set for this study. It would be difficult for these families to afford a home of acceptable standards; their only option would be to obtain funding from the private sector, which establishes conditions that low income families can usually not meet, e.g. annual interest rates above 12 per cent for mortgage loans.

The reform of income tax legislation introduced deductions on the payment of mortgage loans. INFONAVIT and FOVISSSTE affiliates who got a loan could deduce a part of the interests paid in a year from taxable income. To calculate the amount that can be deducted, both the initial and final balances of the period converted to 'investment units' (UDIS), which are units of value introduced after the financial crisis of 1995 for financial transactions, then the final balance is subtracted from the initial and the result is converted back to pesos. This last amount is deducted from taxable income. In December 2011 one peso (\$1) amounted to 4.7 UDIS, and in December 2012 to 4.9 UIDS.

The application of the deductions would represent an annual increase of \$449 (£39) in the disposable income of families earning one minimum wage, covered by either the INFONAVIT or FOVISSSTE. That amount would represent two per cent of original earnings; not a significant increase considering that the interests paid would represent more than half their initial income. In the case families earning five times the minimum wage, beneficiaries of INFONAVIT would get back \$1,621 (£143), 1.4% of their original earnings; and beneficiaries of FOVISSSTE \$1,075 (£95), 0.9% of original earnings. The former would get back a higher amount but that will not compensate for the higher interest rates they pay.

These calculations were carried out for purchasing of an average home in a working class neighbourhood. Middle and upper income families would aim for a more expensive home, and if employed in the formal economy, the resources accumulated in their individual account would allow them to purchase it. In addition, they could get back from tax deductions much higher quantities than the ones calculated here.

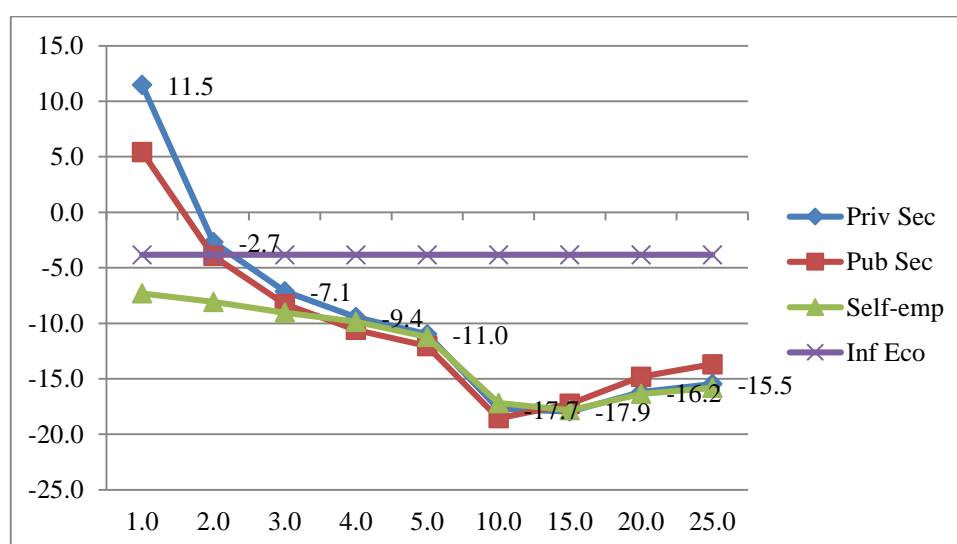
The analysis of housing programmes has revealed the inequality of the system, and much lower levels of protection for low income families than other policy areas. The system of individual accounts means that formal sector employees with low earnings would hardly be

able to accumulate a sufficient balance to obtain an affordable loan from housing agencies. At five times the minimum wage they would afford it, but public sector workers would obtain much favourable conditions. Benefits for families with no social insurance have increased, but as in other policy areas, they are minimal and insufficient to raise living standards in a significant way.

## 7.5. Summary of Findings

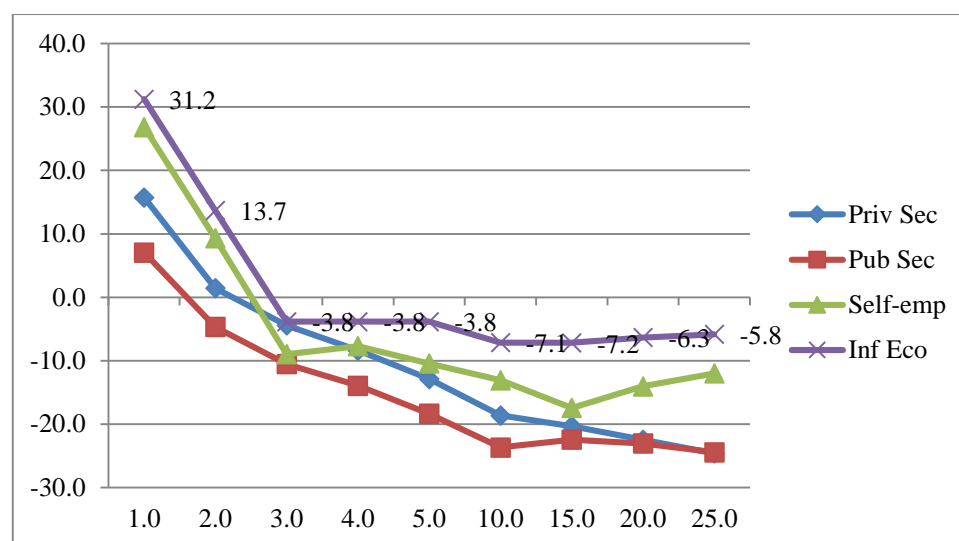
The calculations presented in this and the previous two chapters revealed that the reforms generated important changes in the levels of support offered by the state to Mexican families. Figure 48 graphs the difference between disposable income -after contributions, taxes and cash benefits- and original income for 1994; figure 49 presents the same indicator for 2012. The figures present the results for the standard household composition of a couple with a male earner and two young children, four employment profiles and nine income levels. None of the results discussed in this part of the section include housing benefits.

**Figure 49. Variation between Disposable Income and Original Earnings, 4 Employment Profiles, Nine Income Levels, 1994 (% of original earnings)**



Source: Own calculations.

**Figure 50. Variation between Disposable Income and Original Earnings, 4 Employment Profiles, Nine Income Levels, 2012 (% of original earnings)**



Source: Own calculations.

As can be observed, the reforms modified the levels of cash support offered by the state to different types of families. In 1994, the family with an earner employed in the private sector at one minimum wage would have been receiving the higher levels of support, raising its disposable income in 11.5 percentage points above the original. In that year, disposable income would be raised above the original only for that family type and for the family with the earner employed in the public sector also at one minimum wage. Families of earners that were not formal sector employees were not receiving any support.

On the other hand, families at earnings levels of 10 times the minimum wage of all employment profiles, except the one of the informal economy worker, appeared to be the ones contributing with the highest percentages of their original earnings to fund the system; in fact, after that level the proportion of disposable income would be expected to rise as earnings increased.

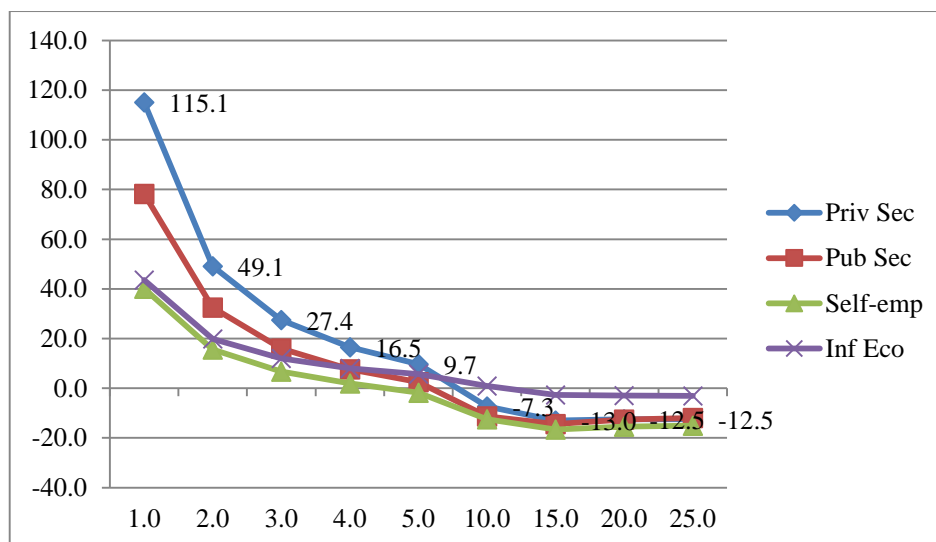
In 2012, the reforms would be expected to raise disposable income above the original for almost all employment profiles up to an income level of twice the minimum wage and at higher proportions than in 1994. The highest increases by far would have been obtained by families with no social insurance coverage, for example, a family type of an earner employed in the informal economy would have passed from a disposable income of 3.8 percent less

than the original to 31 per cent more than original earnings. On the other hand, contrary to the situation of 1994, family types of the highest income level would now be expected to contribute with highest proportion of their earnings, although there were significant variations across employment profiles. The system for families of private sector employees seems to be the most progressive; the system for families of public sector employees appears to be progressive too but only up to a level of original earnings of 10 times the minimum, after which the proportion of disposable income remains similar; whilst the system for families of self-employed shows uneven effects with the highest percentage of available income being registered at 15 times the minimum wage. Family types of earners in the informal economy contribute with similar percentages after the level of two times the minimum wage, revealing the lack of progressiveness of the Popular Health Insurance contribution structure, the only contribution they would be paying.

Adding the value of benefits in-kind would have different effects in 1994 and 2012. The proportions of final income including these benefits from the original for each year are shown in Figures 50 and 51. At original earnings of one minimum wage, in 1994 the value of healthcare and education would have increased the gap in final income between families with and without social insurance coverage; for example, difference in final income between a family type of an earner employed in the formal private sector and covered by the IMSS and the family type of an earner employed in the informal economy would be expected to pass from 19 percentage points before to 75 points after the value of the services.

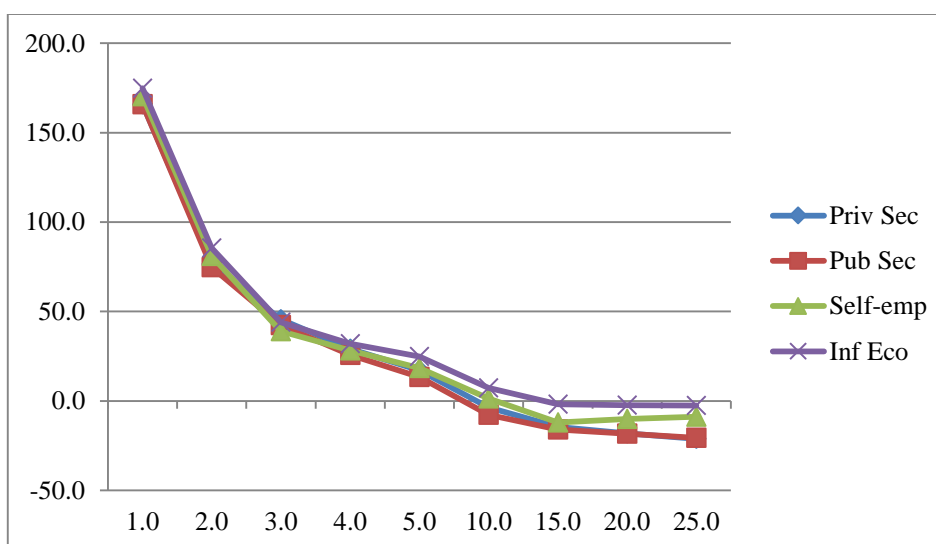


**Figure 51. Variation between Final Income and Original Earnings, 4  
Employment Profiles, Nine Income Levels, 1994 (% of original earnings)**



Source: Own calculations.

**Figure 52. Variation between Final Income and Original Earnings, 4  
Employment Profiles, Nine Income Levels, 2012 (% of original earnings)**



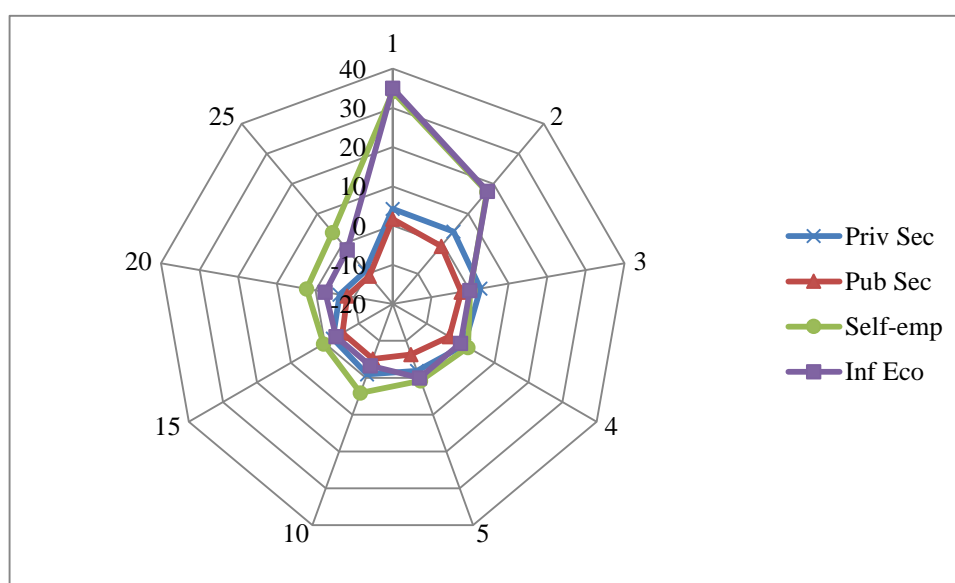
Source: Own calculations.

Contrary to 1994, in 2012, at earnings of one minimum wage, families of informal economy workers not covered by social insurance would be expected to obtain the highest final

income. Nonetheless, benefits in-kind would actually close the gap between the income of families covered and not covered by social insurance. Such gap would decrease from 16 percentage points after cash benefits to nine points after healthcare and education services between the family type covered by IMSS and the family type with an earner employed in the informal economy.

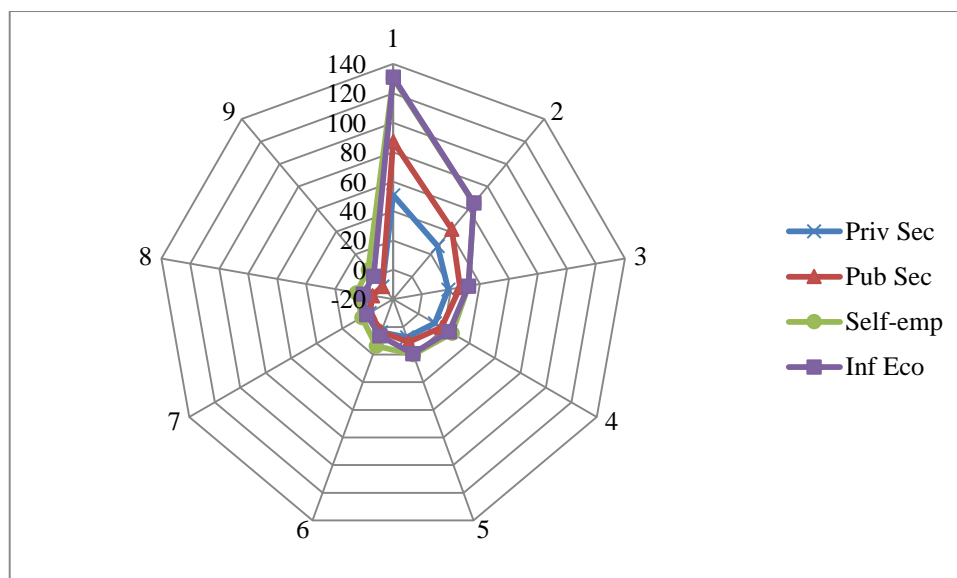
To better illustrate the changes in the levels of support that the reforms represented for different family types, figures 52 and 53 show the variations in disposable income after cash benefits and in net income after benefits in kind. The graphs show the percentage points in which the reforms increases or decreased each indicator between 1994 and 2012. The figures do not include housing loans or subsidies. Household composition corresponds to the standard family of four members.

**Figure 53. 2012/1994 Difference in Disposable Income, 4 Employment Profiles, Nine Income Levels, (percentage points)**



Source: Own estimations.

**Figure 54. 2012/1994 Difference in Final Income, 4 Employment Profiles, Nine Income Levels, (percentage points)**



Source: Own estimations.

The figures reveal how the increases in the levels of cash support were largely concentrated on low income families with no social insurance coverage. The changes were of 40 percentage points for families of self-employed earners and earners employed in the informal economy. The variations decrease with income level, demonstrating how the reforms did have a redistributive element.

Families with no social insurance coverage still turn out to be the most benefited by the reforms after adding the value of benefits in-kind, but interestingly, families of public sector workers distance themselves from formal private sector workers, as the result of higher spending levels. If the amounts of housing loans or pension amounts were added, the difference would be higher. This trend reveals that in Mexico social spending is still tied to discretionary political negotiations; public sector workers were offered higher benefits in return of their acceptance of social insurance reform. The graphs also reveal the

## 7.6. Concluding Remarks

The empirical analysis finalises with this chapter. The calculations showed the high value that benefits in-kind have for Mexican families, especially childcare for families with women in

work; and the fragmented and unequal natures of housing policy, which coincide with changes in other policy areas.

The chapter concluded with a summary of the effects on all the household types used for this study. Results showed that the reforms have emphasised the welfare of low income families with no social insurance coverage, with families with older children receiving more benefits. This has been the product of the two logics that were combined in the design of the reforms: the productivist and residual logics. The outcome has been a tax/benefit system that remains highly fragmented with low redistributive potential. The next chapter discusses these findings.

## **8. The New Architecture of the Tax/Benefit System**

### **8.1. Introduction**

This chapter serves the purpose of outlining the main findings from the data analysis and discussing them in relation to the literature on recent social policy changes in Latin America and beyond. The calculations revealed that the reforms had increased levels of vertical and horizontal redistribution, but in a particular pattern that was shaped by two logics applied in their design: the residual and social investment approaches. The adoption of these logics resulted in the creation of a fragmented system that fails to offer comprehensive levels of social protection to large sectors of the population. These are the three themes discussed in this chapter.

The rest of the chapter is divided in the following sections. The next section analyses the changes in the levels and types of potential redistribution generated by the reforms. The third section discusses the effects of the logics behind the design of the reforms. The fourth section describes the consequences of the fragmented policy architecture that resulted from the particular type of redistribution achieved by the adoption of the reform logics. The chapter follows with a description of the main features of the social policy model that emerged from the reforms, and concludes with some final remarks.

### **8.2. More Redistribution, Reform Logics and Persistent Fragmentation**

The first part of this section summarises the study's main findings in terms of the changes in the levels of support offered by the state to different family types before and after the reforms. The second part discusses three main findings: the system's higher levels of potential redistribution, the residual model adopted for the design of the reforms and the construction of a fragmented social protection architecture.

#### **8.2.1. Higher Levels of Redistribution**

##### **8.2.1.1. Changes in vertical redistribution**

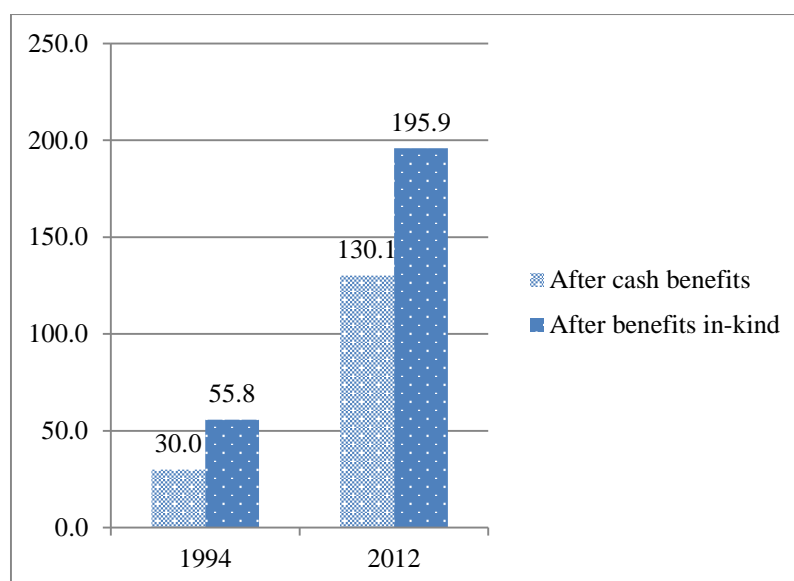
Broadly speaking, the reforms increased the tax/benefit system's expected levels of vertical redistribution from high to low income families. In 1994 the family type with the highest proportion of disposable income after cash benefits and of final income after benefits in-kind

would have been the one with original earnings of one minimum wage and the earner employed in the formal private sector; this family type would have obtained a disposable income 11.5 higher than the original after taxes and cash benefits and a final income of 115 per cent of the original after benefits in-kind. On the other side, the family types contributing with the largest shares of their original cash earnings would be the one with the earner employed in the public sector earning 10 minimum wages, which would contribute with 19 per cent of original income. After adding the value of benefits in-kind, the family type that contributes the most would be the one with the self-employed earner with an income of 25 times the minimum wage, which would have been contributing with 15 per cent of its original income.

In 2012 it was the family with the earner employed in the informal economy at one minimum wage that would be expected to receive the highest levels of state support, raising its disposable income after cash benefits in 31 per cent and its final income after benefits in-kind in 175 per cent above the original. On the other hand, the family type of the earner formally employed in the private sector turned out to be the one contributing the most: 25 per cent of its disposable income and 21 per cent of the final income adding the value of welfare services.

The reforms modified the family types that gained and lost most income, but in both years redistribution went from high income to low income families. The difference is that in 2012 the distance between major losers and gainers was larger. Figure 54 shows the difference in the percentages of disposable and final income of the original, between the family types with the highest gains and losses in each year. As can be observed, the difference in disposable income increased from 30 percentage points to 130 points and the difference in final income after benefits in-kind from 56 to 196 points. These increases illustrate the growing levels of state support that low income population were receiving after the reforms. Moreover, in 2012 it is no longer a family type earning 10 times the minimum wage that contributes the largest share of their cash earnings, but a family type with original earnings of 25 times the minimum wage.

**Figure 55. Distance between Highest Net Gainers and Highest Net Contributors, 1994 and 2012 (percentage points)**



Source: Own calculations.

The calculations shown so far in this section correspond to the standard family of a couple with two young children. But, as will be discussed in the next section, the family types that would be expected to gain the most from the reforms would be the ones with more and older children and with women in work.

The emphasis of the reforms on the welfare of low income families can also be observed in the case of households of pensioners. Pensioners of previous low earnings were benefited by the reforms, contrary to pensioners of previous middle and high earnings, who would obtain much lower replacement rates after the reforms.

The main policy reforms that triggered the changes in the levels of vertical redistribution were the following:

- A more progressive income tax structure, with a stronger effect of subsidies for low income families and increases on the fixed fees and marginal rates for high income families.
- The introduction and expansion of social assistance programmes that target low income families.

- The introduction and expansion of social assistance programmes that target families with no social insurance coverage, because even if they benefit families from all income lower end of the income scale.

There is however one caveat regarding income tax deductions. The deductions calculated for this study would generate an annual reduction the income tax of a family earning 25 times the minimum wage of \$4,665 (£412). This amount would represent a subsidy that this family type would get from the state, which represents more than half the amount of \$7,980 (£704) that a family earning one minimum wage would get in Oportunidades benefits. For this thesis, spending on private healthcare and education were estimated at conservative levels, using national averages, but in fact upper income families spend much more. For example, according to the 2012 national income and expenditure survey, households of the 10th income decile spend on healthcare on average \$12,728 (£1,124) per year, compared to an average of £1,471 (£130) for households of the first decile. The amount used in this study for a family of four was \$2,745 (£242). Hence, considering also that as part of the income tax reform new deductible expenses were added, the amount that a high income family get back from income tax deductions should be expected to be much higher than the amount estimated in the current study, possibly surpassing the cash benefits paid to a poor family. The result would be that the degree of vertical redistribution could be lower than the one estimated here. Nonetheless, the findings of this thesis do coincide with similar studies on vertical redistribution recently carried out in the country.

Scott (2013) found out that for 2010 the system delivered positive net monetary benefits until the 3rd income decile, and when taking into account benefits in-kind, net benefits were positive until the eighth decile. Scott's paper's findings are described in the third chapter of this thesis and the net effects are detailed in Table 3.1. Whilst this thesis and Scott's studies are not strictly comparable because they seek different objectives, cover distinct time periods, use different variables and data sources and adopt different research approaches –Scott looks at outputs after policy implementation whilst the current thesis aims to map the change in the system's architecture–, both conclude that there is a redistributive inclination towards low income population. Table 30 compares Scott's and this study's findings. In the case of the present study, the table presents findings for the standard family composition and two employment profiles: formal private sector and informal economy. Family models are placed



in the corresponding income decile, matching their net cash income after taxes and benefits with the net cash income reported in the 2012 ENIGH by decile.

**Table 30. Net Gains and Losses after Taxes and Benefits by Income Level**

Scott’ Findings			Thesis Findings				
Decile	Net Benefits 2010		X MW	Net Benefits 2012			
	Total	Monetary		Private Sector		Informal Economy	
				Final	Cash	Final	Cash
I	137.9	32.1					
II	54.0	8.1	1	165.8	15.8	174.8	31.2
III	35.3	2.6	2	76.5	1.4	85.5	13.7
IV	25.1	0.0					
V	17.5	-2.8	3	45.6	-4.4	44.0	-3.8
VI	12.1	-4.2	4	29.1	-8.4	32.0	-3.8
VII	6.5	-5.7	5	17.1	-12.9	24.9	-3.8
VIII	1.6	-7.5					
IX	-3.2	-9.4	10	-3.6	-18.6	7.2	-7.1
X	-10.5	-12.7	15	-14.5	-20.3	-1.8	-7.2
			20	-18.1	-22.4	-2.3	-6.3
			25	-21.1	-24.6	-2.6	-5.8

Sources: Scott (2013) and own estimations.

Table 7.1 shows how in both studies, at the end of the first decade of the twenty-first century, the combination of taxes and cash benefits resulted in net gains for people in the first three deciles and that when adding the value of welfare services, up to the eighth decile. There are important differences in the percentages of original income that the system offers or takes away, which could be due to Scott using data from 2010, whilst this study estimates the potential effects of the system as it was designed in 2012; and differences between the variables used in each study.

This thesis, as well as Scott's work, reveal that the tax/benefit system indeed redistributes income from high to low income population. This thesis also revealed that the reforms adopted over the last 18 years did increase the levels the redistribution. Scott's research is limited to identifying redistributive effects by income decile covering only four years, between 2006 and 2010 as explained in chapter 3; and he does not identify the family

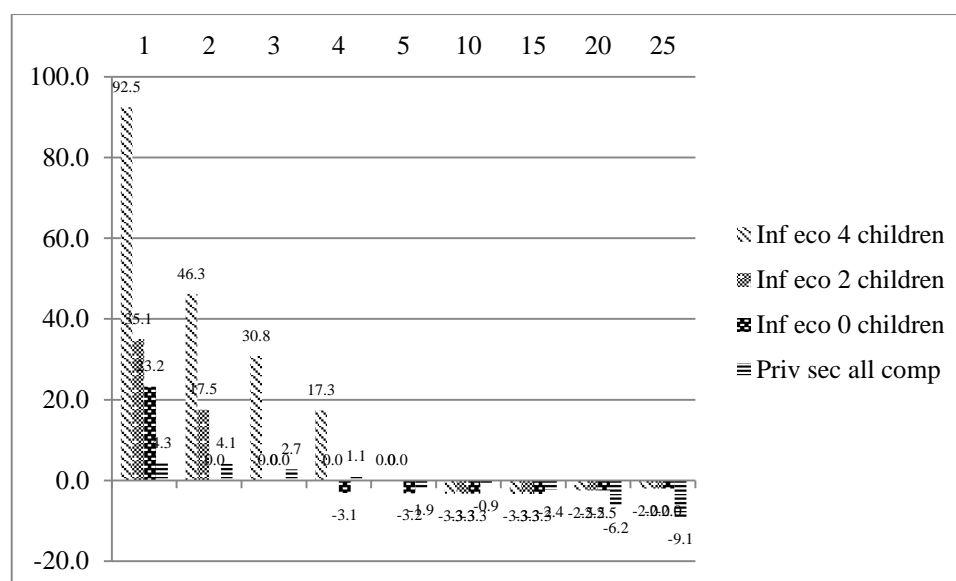
structures that gain or lost the most or the labour market segment in which they are inserted, and his study does not cover a longer period that would allow a comprehensive assessment of the reform phase. On the other hand, this thesis by applying model families, uncovers the redistributive effects of the system's policy architecture across different family compositions and employment profiles. The next part of the section discusses these effects.

#### **8.2.1.2. Changes in horizontal redistribution across household compositions**

In a nutshell, the reforms represented an increase in the levels of redistribution towards families with children and families with women in work. Regarding families with children, prior to the reforms the tax/benefit system simply did not offer any specific support; however the reforms introduced two new programmes which offer additional benefits: Popular Health Insurance by exempting them from the payment of contributions, and *Oportunidades* by paying benefits for each child.

Figure 55 compares the variation in net cash gains after taxes and cash benefits between 1994 and 2012 for three family types with earners employed in the informal economy: one couple with four children (one in each school level), one couple with 2 children (one in primary school) and a childless couple. Additionally, the figure includes the calculations for a family type with an earner employed in the formal private sector that represents all household compositions for that employment profiles, since disposable income would not change with the number or age of family members. Nine income levels are presented. All children were assumed to be girls, because *Oportunidades* pays scholarships of higher amounts for girls than for boys. The calculations for households with self-employed earners would be similar to the variations for households with earners in the informal economy, and households with earners employed in the public sector would register the same variations for all compositions, like families with earners employed in the formal private sector.

**Figure 56. 2012/1994 Difference in Net Cash Gains, Private Sector Employees and Informal Workers, Four Family Compositions, (percentage points)**



Source: Own estimation.

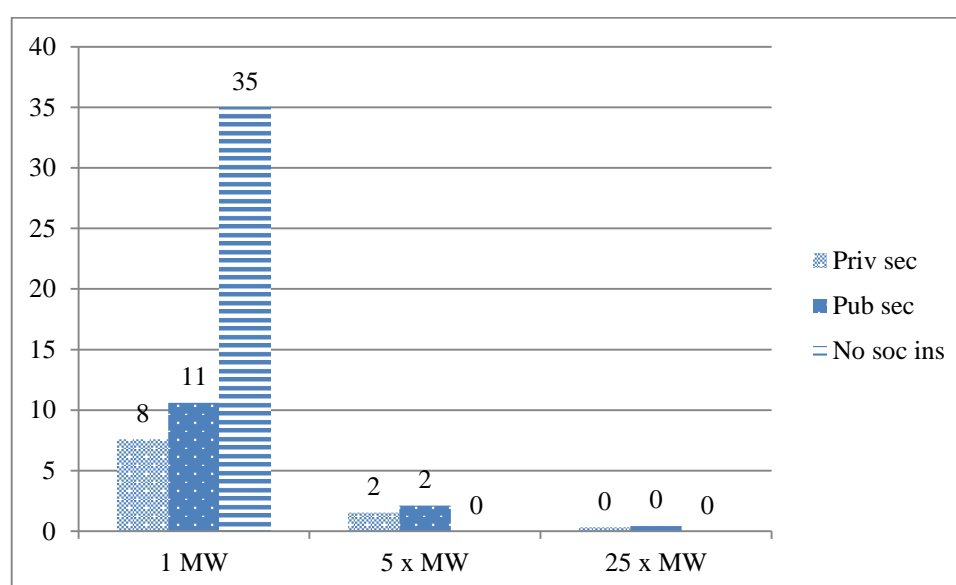
The exemption of Popular Health Insurance contributions represent only a minor support to families with children; for example, an increase of only three points in the percentage of original income for a family with original earnings of five times the minimum wage (see Table 4.10). It is the *Oportunidades* the programme that boosts levels of support for families with children.

In 1994, net cash gains would not have changed across household compositions, i.e. families of the same employment profile and income level would have obtained the same gains after taxes and benefits regardless of the number and age of their members. As the figure shows, by 2012 there would be important differences across families with earners employed in the informal economy. As can be observed, for these households net gains vary significantly depending on the number of children. Families with four children would obtain the largest increases by far and would obtain positive gains until an original income of four times the minimum wage. On the other hand, families with two children would obtain much lower increases, in fact, at one minimum wage, the variation would not be much greater than the increase for a childless couple, and net gains would disappear after an original earnings level of only twice the minimum wage. Families with earners employed in the formal private sector would not be expected to benefit from the benefits that support families with children; hence their 1994-2012 variations in net gains would remain at the same level for all

household compositions, at much lower levels than for families with earners employed in the informal economy.

Families of women in work with young children would be another group of household types that would obtain important benefits from the reforms, in this case from the expansion of day care centres. In 1994 women employed in the formal sector already had the right to childcare delivered by the IMSS or the ISSSTE, but no services were offered to women without social insurance. By 2012, the introduction of childcare centres for children of women with no social insurance coverage would represent an important increase in the levels of support. Figure 56 illustrates the growing importance of childcare. The graph shows the difference in the value of childcare as a percentage of original earnings between 2012 and 1994 for each household type.

**Figure 57. 2012/1994 Difference in the Value of Childcare as a Percentage of Original Earnings, Female Headed Households (percentage points)**



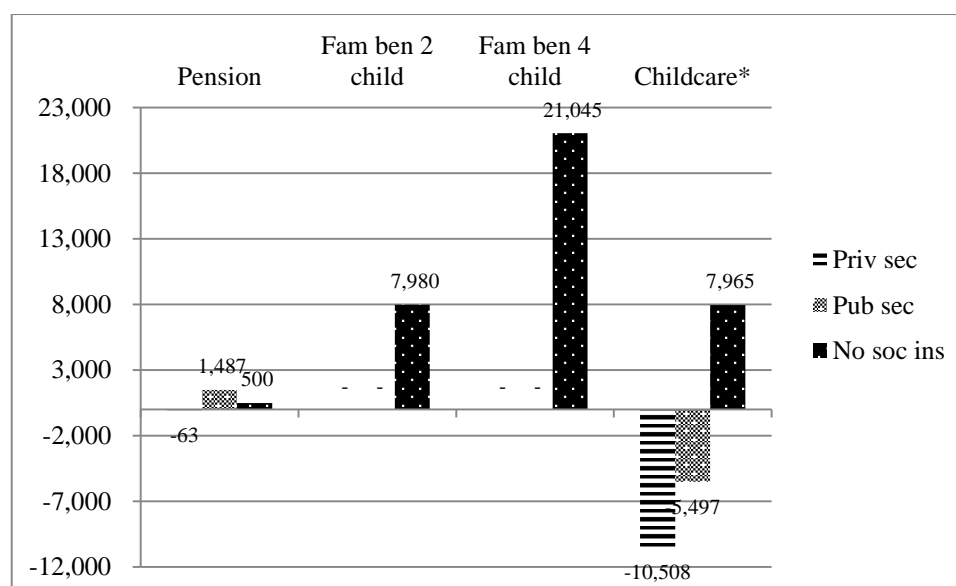
Source: Own estimations.

For a family headed by a woman formally employed in the private sector insured by the IMSS and earning one minimum wage, the value of childcare would represent eight percentage points more in 2012 than the value it represented in 1994. At the same earnings level, for a family headed by a female public sector employee the value of childcare would have increased in 11 percentage points. But the greatest increase would be expected to be

registered for a family of a woman with no social insurance, 35 points of its original earnings at the same income level. At an earnings level of five times, as shown in the graph, eligibility to childcare would be lost for women in work with no social insurance coverage, leaving these women with no support from the state to care for their children and limiting their capacity to join the labour market. On the other hand women employed in the formal sector would be covered at all income levels. As discussed in the previous chapter, the value of childcare is much higher than other benefits in-kind, hence the reforms would have represented an effort to redistribute income towards families of women in work, especially towards low income women in work either self-employed or employed in the informal economy.

Households of elderly people would also result benefited by the reforms, but at lower degrees than families with children and with women in work, and only at low income levels where retired formal sector employees would receive minimum guaranteed pensions, or retired workers not eligible for a social insurance pension would receive a social assistance pension that could represent a significant replacement rate. To further illustrate the degrees of horizontal redistribution that the reforms would be expected to generate, Figure 57 compares the differences between the 2012 and 1994 amounts of the minimum guaranteed pension and the social assistance pension, family benefits (i.e. *Oportunidades*) for a family of two children, family benefits for a family of four children and childcare. For example, in 2012 elderly people formerly employed in the public sector earning one minimum wage would be receiving \$1,487 (£131) more than that they would receive in 1994, because of the increase in the ISSSTE minimum guaranteed pension; people not eligible to a social insurance pension would only be receiving \$500 (£44) more, namely the value of the recently introduced social assistance pension, and people formerly employed in the private sector would actually be receiving less in real terms, even if the value of their pension would be higher compared to the minimum wage.

**Figure 58. 2012/1994 Difference in Benefits' Amount, 4 Employment Profiles (pesos)**



Source: Own calculations.

\* The amounts of childcare for formal private and public sector employees decreased because the costs per child are lower in 2012, since both IMSS and ISSSTE extended the contracting out of services to private sector providers. Nonetheless, the coverage of both systems increased significantly, and especially the IMSS covers a much larger number of children, as explained in the previous chapter.

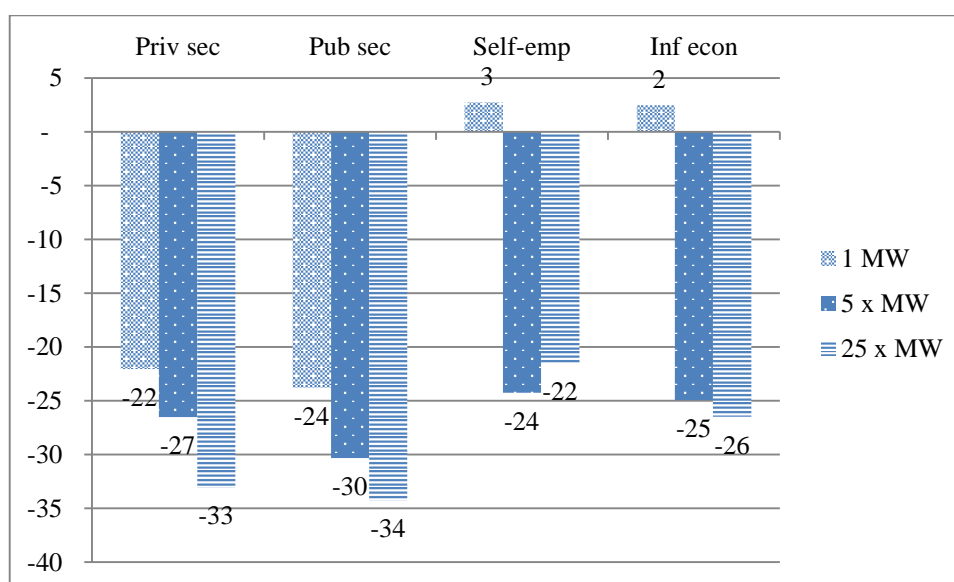
The figure shows how in real terms, the largest amounts by far have been directed towards families with children and women in work with no social insurance coverage, whilst pensioners of the same employment profiles receive a minimal amount. In short, the redistributive effort of the reforms was eschewed towards low income families with more and older children and towards families of women in work. This type of expansion would apparently fit the 'social investment' perspective, which has recently occupied a central space in the discussion about recent developments in social policy (Morel et al., 2012); such link is further discussed below, as part of the characterisation of the Mexican welfare regime model. There are also great differences in the redistributive effort among employment profiles; the next section summarises the results on the levels of redistribution within that dimension.

### 8.2.1.3. Changes in horizontal redistribution across employment profiles

The thesis has shown how the reforms have favoured employment profiles with no access to social insurance. So far the analysis has been based on the comparison of the proportion of

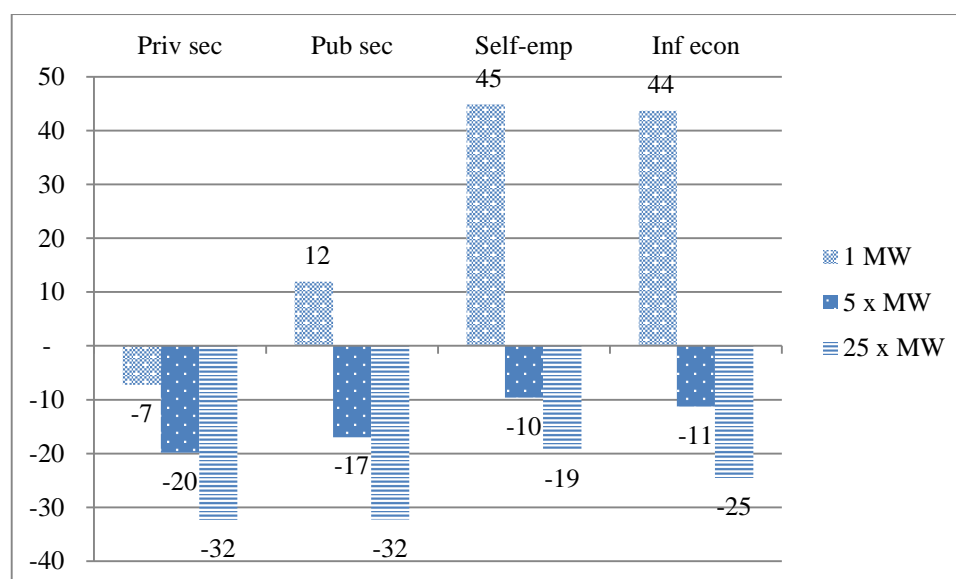
disposable or final income from the original. Another way to illustrate the differences in the redistributive effort across employment profiles is to compare the changes in the amounts of disposable or final income between 1994 and 2012. Figures 58 and 59 show the variations for the four employment profiles at three income levels. The household composition that is used as the basis for comparison is the standard family of the couple of one male earner with two children, for the reasons explained above. The minimum wage in 2012 was 25 per cent lower in real terms than in 1994, hence the most benefited family types by the reforms would be the ones with variations lower than 25. The first figure shows the variations in disposable income after taxes and cash benefits, the second figure shows the variations in final income including the value of benefits in-kind.

**Figure 59. 2012/1994 Percentage Variation in Disposable Income after Cash Benefits, 4 Employment Profiles**



Source: Own calculations.

**Figure 60 2012/1994 Percentage Variation in Final Income after Benefits In-Kind, 4 Employment Profiles**



Source: Own calculations.

Figure 59 shows that after taxes and cash benefits, the most favoured profile would be families with self-employed earners. Interestingly, within this profile the family earning 25 times the minimum wage would obtain a stronger improvement than at five times the minimum wage, because of the effect of the introduction of the minor taxpayers' regime. On the other extreme, family types of public sector employees would be the most negatively affected profile, mainly because of the increases of social insurance contributions.

Adding the value of benefits in-kind improves income of public sector employees' families more than families of private sector employees, basically due to higher spending levels on healthcare for the former that resulted from the 2007 ISSSTE reform. Hence, even if affected by a rise in their social insurance contributions, public sector employees were able to gain some benefits from the reforms as a part of the negotiation process; on the other hand, families of formal private sector employees would register the lowest levels of final income. Nonetheless, family types of self-employed and informal economy earners remain as the most benefited by the reforms, favoured by the introduction of Popular Health Insurance healthcare services.

In sum, the findings show that the reforms directed redistributive efforts towards families with no social insurance coverage, with a strong emphasis on low income families. Earners of



these groups of families would tend to be in precarious employment; indeed there was a strong emphasis on programmes that aim to act as tools for the incorporation of people into the labour market. Several questions arise: what was the rationale applied in the design of the reforms, how can the welfare model that emerged from them be characterised and what is the potential of that model to reduce the high levels of poverty and inequality that have historically affected Mexico.

### 8.2.2. The Logics behind the Reforms

The patterns of redistribution obtained from the calculations revealed the effects of two complementary approaches followed in the design of the reforms: a ‘social investment’ perspective and a residual logic. Both approaches fuse to shape a particular type of social policy that fails to protect the majority of families from poverty and to reduce inequality.

#### 8.2.2.1. The ‘social investment’ perspective

Morel et al (2012) comment that the adoption of the ‘social investment’ perspective in the design of social policies seeks to address new social risks, reduce the intergenerational transmission of poverty, enhance the human capital of individuals and families so that they can assume responsibility for their own welfare through market income, and eventually promote economic and employment growth. These objectives are evident in the design of the two of the main Mexican reforms: *Oportunidades* and the expansion of childcare.

It can be argued that *Oportunidades* and other Latin American conditional cash transfers programmes pioneered the ‘social investment’ perspective. *Oportunidades* main objective is indeed to break with the intergenerational transmission of poverty. The programme’s foremost aim is to enhance the human capital of poor children by enabling them to remain in school until high school, so that once they graduate, they can have the possibility of joining the labour market and obtaining an income that will allow them to overcome their condition of poverty. The majority of the benefits offered by the programme take the form of scholarships and the amounts increase substantially with school level, to compensate families for the opportunity cost of not working and to incentivise them to stay in school (Levy, 2006, Levy and Rodriguez, 2004).

*Oportunidades* represents an important effort to deliver income support to sectors of the population that had not received any substantial social policy benefits from the state in the

country's history. Nonetheless, the adoption of a 'social investment' perspective can have a number of negative consequences. Families with young children are left with very little support. As the calculations showed, the annual benefits offered to urban childless couples and families with one newly born child and a child in primary school are almost the same, \$7,980 (£704) annually for the former and \$5,280 (x466) for the latter, the difference of \$2,700 (£238) corresponding to the special support 'living better' for families with young children only introduced a few years ago. At the other end, a family that had also two children but one in secondary school and the other one in high school would be expected to receive benefits for \$21,04512 (x1,860), 160 per cent more than the family with two young children, both family types being eligible at the same income levels. Larger families, e.g. with two young and two older children would remain eligible at higher income levels, as discussed previously in the thesis. The 'social investment' perspective as adopted in Mexico, appears to be neglecting the welfare of families with young children, limiting the system's redistributive potential towards them, in comparison to families with older and/or more children, as authors like Damian (2007) argue, in its current configuration the Mexican social policy is generating inequalities between different types of families.

Another one of the Mexican major reforms that can be seen as reflecting a 'social investment' perspective is the expansion of childcare services. In 1994, only women in formal employment had the right to childcare, which was delivered through the social insurance system, although services were limited and coverage rates minimal. As previously discussed, in recent decades not only have social insurance childcare services registered a significant expansion, but a new network was created to provide to services to children of women with no social insurance coverage.

The reform has to be understood in the context of increases in the female labour force participation rate, which passes from 37 per cent in 1994 to 45 per cent in 2012 (WB). Indeed the state appears to have responded to this increase by expanding childcare services, but one should be clear about the main drivers behind the rise in the number of women joining the labour market. More women join the labour market to complement household income because of the fall in real wages. In the period covered in this thesis, the minimum wage lost

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<sup>12</sup> This ammount would the same for a family type of four children, one newly born, one in primary school, one in secondary school and one in high school, becasue both cases would reach the maximum limit.

25 per cent of its real value and average household income (total current income) fell 14 per cent. At the same time, the number of earners per household increased from 1.7 in 1994 to 2.4 in 2012, and in urban areas to 2.7 (ENIGH, 2012).

The expansion of childcare would be responding to this conjuncture. The state provides services to enable women to join the labour market because without their earnings, family income would drop even more. Besides childcare, the state has not designed any other benefits or services for women in work. The percentage of female headed households increased from 17 per cent of the total number of households in the country in 1990 to 23 per cent in 2005 (INEGI, 2013). The Mexican tax/benefit system does not offer any type of 'passive' income support and childcare services represent the only benefit that has been created for women in work who are lone mothers. It could be argued that the adoption of the 'social investment' perspective in Mexico, implicitly assumes that women should be able to provide for themselves and their families with a market income and no government support, except services that enable them to participate in the labour market.

Indeed, benefits that protect family income when the earner is not able to participate in the labour market have not been prioritised by the reform process. The non-contributory old-age pension amounts to only \$500 (£44) per month, whilst per child spending on childcare services for women with no social insurance amounts to \$885 (£78) per month, and the monthly quantity that is paid to the private provider amounts to \$700 (£62). Total budget allocated to that pension programme, \$17.7 billion (x1.6 billion), and the number of pensioners, 3.1 million, are much higher than the resources spent on the childcare programme, \$3.1 billion (£274 million) and the number of children covered, 268 thousand, but the resources spent per beneficiary are higher in the latter than in the former programme (Presidency, 2013).

The reforms did not consider the introduction of income support for sick or disabled people not covered by social insurance, nor for the unemployed. The advocates of the 'social investment' perspective emphasise that proper income support to combat poverty and inequality should be precondition of more 'enabling' measures (Morel et al., 2012). It would seem that this has not happened in Mexico. In addition, a residual logic that has kept existing benefits at minimal levels would also be hampering the system's redistributive potential.

### 8.2.2.2. The residual logic

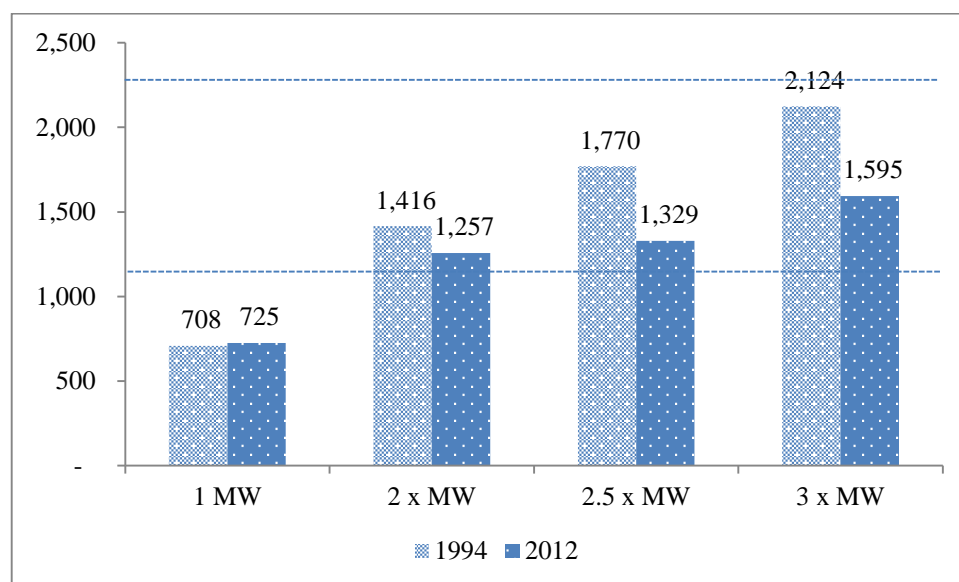
The design of the reforms has combined the ‘social investment’ perspective with a residual logic regarding the role of the welfare state that assumes a greater reliance on market arrangements and targeted benefits. As explained in chapter 3, the residual paradigm was introduced in Mexican social policy with the IMSS pension reform of 1997, which substituted the pay-as-you-go system with a system of individual capitalisation and privatised the management of pension funds. In that same year, the expansion of social assistance began with the introduction of Progresa, the precedent of *Oportunidades*. This thesis has shown that the reforms did increase the potential levels of vertical redistribution, although with an inclination towards some household types and employment profiles, in part as a result of the adoption of the ‘social investment’ approach. One question that remains is to what extent the benefit levels generated by the reforms can hold the potential of combating poverty.

The negative effects of social insurance pension reforms were discussed in chapter 5. As was explained, low income workers would not be as affected as workers from higher income levels, because the amount of minimum guaranteed pensions was kept at the same level, and even increased for public sector workers. However, middle and upper income workers would hardly obtain replacement rates similar to the rates offered under the pay-as-you-go systems even if they were to contribute for almost double the number of years required by the law to be eligible. In the case of other family types, the expansion of social protection coverage under residual principles would represent serious barriers to its potential at reducing poverty rates.

Figure 60 and 61 compare per capita monthly disposable income after taxes and cash benefits for families of informal sector workers, of two different household compositions, at four income levels in 1994 and 2012. The first figure’s composition corresponds to the standard family of the couple with two young children; the second figure shows the results for a couple with two older children, one in secondary school and one in high school. Per capita income was calculated applying the same economies of scale used to establish eligibility of family types to social assistance programmes (see chapter 5). The first dotted line marks the ‘minimum welfare line’, that is the first official poverty line set by the government that represents the minimum income that a person requires to meet their basic nutritional needs; in December 2012 the amount was \$1,159 (£102) per month. The second dotted line marks the ‘welfare line’, that is the second poverty line that represents the minimum income that a

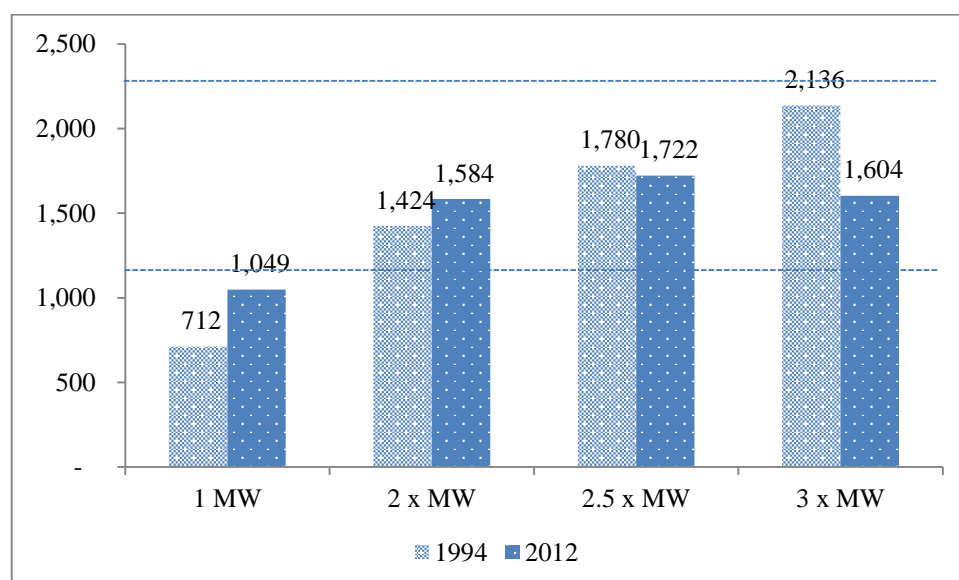
person requires to meet their basic nutrition and non-nutritional needs; in December 2012 the amount was \$2,388 (£211).

**Figure 61. Disposable Income and Poverty Lines, Informal Workers, Couple with 2 Young Children (pesos)**



Source: Own calculations.

**Figure 62. Disposable Income and Poverty Lines, Informal Workers, Couple with 2 Older Children (pesos)**



Source: Own calculations.

The standard family would be receiving benefits until an income level of two times the minimum wage; the family with the children in secondary and high school would receive benefits until the earnings level of 2.5 times the minimum wage. Three conclusions can be extracted from the graphs.

First, *Oportunidades* benefits would at least partially compensate low income families for the fall in real wages, although the degree of compensation varies among types of family compositions. As has been previously commented, the minimum wage lost 25 per cent of its value between 1994 and 2012. For the standard family type, the new cash benefits would be sufficient to offset that drop and raise disposable income in 2012 slightly above 1994, but only at the lowest income level, and once the eligibility to the programme is lost after two times the minimum wage, the gap between disposable incomes of both years widens. The family type of older children presents a better situation because benefit amounts would be higher, but even if at 2.5 times the minimum wage it would still be receiving benefits, 2012 disposable income falls below the 1994 income, and once eligibility is lost, income the gap between the two years widens. *Oportunidades* would be acting as a mechanism to compensate for the fall in real wages, although only families at the bottom of the income scale would be receiving such benefit.

Secondly, the new benefits are insufficient to raise low income families above poverty lines. In 2012, family types of both household compositions with original earnings of one minimum wage would not even reach the first poverty line. This means that even after the support offered by the state, neither of these families would obtain an income sufficient enough to meet their basic nutritional needs. Actually, disposable income of the family type with young children would represent almost 40 per cent less than the 'minimum welfare' line set by the own government, and disposable income of the family with older children would be 37 per cent less. Family types of higher income levels would obtain an income higher than the first poverty line, but only barely above it and none of them reaches the second poverty line, which is supposed to include the minimum nutritional and non-nutritional satisfactors that a person needs. As Damian (2007) argues, in the cases where *Oportunidades* benefits manage to raise family income slightly above the 'minimum welfare' line, it would still mean that the family should devote all of its earnings to purchase food, without the capacity of spending in any other item, including clothing, housing or transportation. Hence, even if the reforms have

increased the system's degrees of redistribution, the changes fail to redistribute income to a degree that would lift families from poverty.

Thirdly, the targeted nature of the reforms excludes families that are not poor enough to qualify for the programmes, but still fall below poverty thresholds. According to the calculations, family types of two young children would lose eligibility to *Oportunidades* at an income level of just 2.5 times the minimum wage. As has been extensively discussed, families with older and/or more children could continue to receive benefits at higher income levels, but still many families would remain vulnerable. For example, the family types of one child in secondary and one child in high school would receive benefits until a level of 2.5 times the minimum wage, however, as can be observed in the figure 7.x, the effect would be that when benefits cease at original earnings of three times the minimum wage, disposable income would actually be lower than at a level of twice the minimum wage. Although strict targeting has been praised by the government as one of the virtues of social policy reforms in Mexico (SEDESOL, 2007), the fact is that impact evaluations of *Oportunidades* have revealed serious negative consequences (Molyneux, 2006); beyond them, the calculations presented in this thesis illustrate the extent to which the programme's design results in the exclusion of families that would still require support to overcome their condition of poverty.

The negative consequences of the residual logic can also be observed in other areas. Women in work not covered by social insurance would only be eligible for childcare services until a level of original household earnings of four times the minimum wage. The calculations carried out for this thesis assumed that the woman was a lone mother, hence 100 per cent of household income would be provided by her. But if the woman had a partner, both incomes would be added to establish eligibility, which would mean that she would be at risk of losing the right to childcare at even lower earnings levels.

In pensions, the new non-contributory pensions are not explicitly targeted at low income people anymore, although they original were; nonetheless, their low amount does suggest that they mainly aim to provide support to poor people. Moreover, their monthly amount represents 57 per cent less than half the first poverty line based on basic nutritional needs; hence, it could be argued that for the state, elderly people should only entitled to buy food for less than half of the month.

In housing, only families at the lower income levels would be eligible to subsidies, leaving families who were still poor and were not covered by the social insurance system without any support; but given the low amount of the subsidies, even families that receive them would find it difficult to improve their housing conditions in a significant way.

Advocates of the ‘social investment’ approach argue for a clear distinction between it and the residual paradigm. Nonetheless, they do point out that the division between the two approaches can be easily blurred and that the ‘social investment’ strategy represents a certain degree of continuity with the neoliberalism (Morel et al., 2012). The example of Mexico shows how both perspectives can coexist and generate less than optimal effects. Firstly, one of the risks of adopting the ‘social investment’ perspective materialises, when today’s poor are sacrificed with the expectation that investment in human capital will yield a reduction in future poverty rates (Nolan, 2013). Cash benefits channelled through *Oportunidades* are kept at minimal levels, since their main objective is to support children in school and not to lift families from poverty, whilst families with young children could be receiving lower amounts that leave them even more vulnerable.

Secondly, the residual logic has meant that no comprehensive income protection system for the entire population has been created. Morel et al (2012) highlight that such system constitutes a precondition for the successful implementation of a ‘social investment’ strategy. The Mexican example shows how that precondition can be easily bypassed, as no schemes have been introduced to protect families with no social insurance coverage when income is lost due to illnesses, disability, maternity and other associated risks. The amounts of benefits that were introduced for people with no social insurance were set at minimal amounts, like non-contributory old age pensions. In his proposal for a comprehensive social security system, Beveridge (Williams and Williams, 1987) argued that amounts of insurance and assistance benefits should be enough to guarantee a basic income for subsistence. In Mexico, the two logics applied in the design of the reforms have not only been translated into strict targeting, but also into minimal benefit levels that cannot be expected to guarantee a subsistence income or to raise families from poverty.

Contrary to what has been occurring in other Latin American countries, poverty in Mexico not only has not fallen in recent years, but has actually increased, and in 2012 poverty rates were higher than the region’s average (UNDP, 2014). It is not the aim of this thesis to establish the determinants of poverty in the country, but the calculations have illustrated that



social policies do not hold the potential of contributing to an effective fight against poverty. The fragmented nature of the reforms constitutes a final feature that has shaped the social policy model that emerged from the reform process.

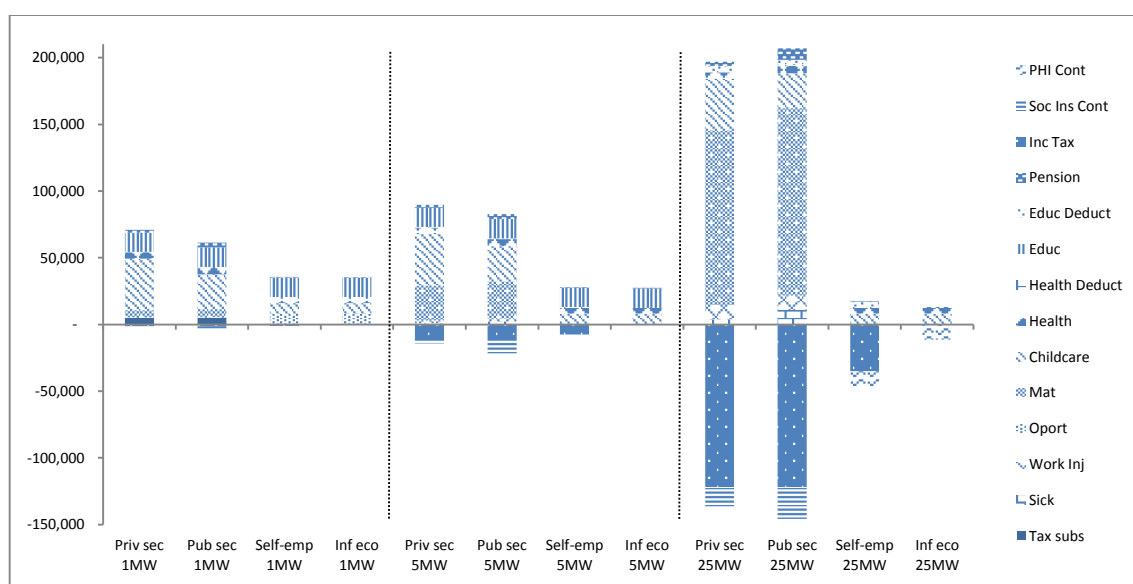
### **8.2.3. A Fragmented System**

One of the main characteristics of social policy in Latin America during its development phase was its ‘truncated’ nature (Barrientos, 2009), because large sectors of the population were left without social protection. Throughout the region, recent reforms have broken with that segmentation. As Dion (2010) argues, the path taken in Mexico has not been to seek the expansion of coverage through the existing social insurance programmes, but rather through the layering of new social assistance programmes along them. As the calculations discussed in this thesis have shown, the expansion has meant, on one hand, the incorporation into the social protection system, of many groups of the population that had never received any substantial benefits from the state, but on the other, the creation of a fragmented and unequal social policy architecture.

Social assistance programmes naturally segment the population among those considered in need of support and those that not. Such type of segmentation should be expected in any country where social policy is based on residual principles. In Mexico, however, there is also a horizontal fragmentation across different types of insertion in the labour market. Hence, access to social protection continues to be determined by the employment status of the family’s earner. The particular type of expansion of social protection in Mexico has created a highly unequal architecture

Figure 62 compares tax and benefit levels in 2012 according to the employment profiles of family earners used for this thesis. Benefit levels are shown in annual amounts per individual earner, including benefits that only female earners would be entitled to, namely childcare and maternity benefits. The figure shows amounts for three income levels. Benefits in-kind are quantified according to amounts of spending per beneficiary.

**Figure 63. Structure of Taxes and Benefits, 2012**



Source: Owe elaboration.

What can be highlighted from the figure is the disparity in the types and amounts of benefits by employment profile. Moreover, benefits are delivered through different programmes administered by different government agencies. The figure reveals a disintegrated system that offers unequal levels of protection and end up duplicating functions and wasting resources. On top of that, it has been pointed out that the system's fragmentation could be generating perverse incentives for the formalisation of the economy.

Levy (2008) has argued that the introduction of benefits for families without social insurance coverage would be incentivising people to join the informal economy. The results presented in this thesis show that benefit levels offered to formal sector employees are still significantly higher than benefits for informal sector workers. This is especially the case of women in work, because of the high value of social insurance maternity benefits and childcare. Nonetheless, informal sector workers in 2012 would receive benefits that informal sector workers in 1994 were not. Other authors have also noted the risk that in a fragmented system, coverage levels of social insurance could diminish when benefits are provided through other types of programmes (Martinez Franzoni and Sanchez-Ancochea, 2014). The question in the case of Mexico would be that if given the choice, to what extent a person would decide to join informal employment because of the minimal benefits that social assistance programmes offer. This thesis does not aim to answer that question or to establish the causes of

informality, but what could be commented are the characteristics of the complex relation between the tax/benefit system and the informal economy.

Informality has been pointed out as one of the main problems in Mexico and in Latin America in general. Some of the tax and contribution changes have not sought redistributive objectives, but rather have had the foremost objective of increasing the size of the formal economy, and hence government revenue. Such is the case of the reduction of social insurance contributions and the introduction of the minor taxpayers' regime, and although income tax rates were lower in 1994 than in 2012, before the latter year and throughout most of the period they were kept at lower levels. It would seem that these measures have failed; as the official statistics show, between 2005 and 2012 the proportion of people employed in the informal economy remained at 60 per cent (INEGI, 2014a), whilst tax revenue as a percentage of GDP in 2012 fell below the Latin American average (OECD, 2012). Notable is the failure of the minor taxpayers' regime; a recently published government report concludes that it actually had a negative effect on the government revenues, as people and firms who would have otherwise paid taxes under the regular tax regime, managed to get registered as minor taxpayers, benefiting from much lower rates (SHCP, 2012), as the calculations of this study showed, especially in the case of high income earners. Special provisions adopted to incentivise formality ended up fragmenting the tax system and generating inequalities, like the benefit system.

Since the creation of Oportunidades, social protection has evolved by adding programmes for families without social insurance. As noted before, the expansion has broken with the original 'truncated' nature of social policy. It could be argued that these reforms responded to the system's historic inequality system. By the mid-1990s, some of the leading and most influential Mexican social policy specialists were pointing out that inequality as the major problem with the country's social policy architecture; social insurance beneficiaries were perceived as a privileged group that captured most of the resources (De Gortari and Ziccardi, 1996). The problem is that the policy changes have not solved the problem of inequality, because instead of diluting the system's segmentation through the universalisation of social insurance or the introduction of universalist social programmes with access granted as a right of citizenship, reformers seem to have chosen the introduction of targeted social assistance programmes. The outcome is a fragmented policy architecture, with a variety of social programmes that offer different benefits, delivered by different agencies, for different

population groups. Even worse, at the end, the employment status of the family's breadwinner continues to determine access to social protection, which was actually one the major criticisms of the social insurance model.

The greater reliance on social assistance programmes reveals that social insurance is perceived to be incompatible with an export-oriented economic strategy. Levy (2008, 2012) has for long argued for the creation of a 'universal' type of social policy, and although with important differences with the conventional conceptualisation of universalism, he does emphasises the need for a more equal system that dissolves its current fragmentation. The problem with his proposal is that it would be funded by consumption taxes, which are highly regressive. His reasoning is that both social insurance contributions and income taxes are incompatible with a competitive globalised economy. Social insurance is perceived to be especially bad because it increases labour costs, which firms must keep low to compete in domestic and foreign markets. During the recent presidential elections, the candidate of the conservative party was in fact suggesting the disappearance of the social insurance system to raise the competitiveness of private firms (Aristegi-Noticias, 2013). The context of an open economy is crucial to understand the fragmented type of social policy expansion that has been pursued in Mexico.

The expansion of social assistance would be functioning as a complement to the neoliberal economic strategy. Apart from enabling the provision of welfare benefits and services without affecting labour costs, there are three ways in which social assistance programmes complement the economic model adopted in Mexico during the last decades. First, targeted programmes keep low public social spending low. Mexico registers much lower levels of social spending than other comparable Latin American countries. As reported by the ECLAC, between 1994 and 2010 social spending as a percentage of GDP increased in just 2.9 percentage points, compared to 6.8 Argentina and 8.9 in Brazil. Low levels of social spending contributed to the liberalisation of the economy in two ways; on one side they permitted the diversion of resources towards spending on sectors considered more important, like infrastructure; on the other, they helped to maintain the macroeconomic stability deemed to be a precondition to attract foreign private investment (CEPAL, 2013). Both of these points are of course arguable, because the fact is that countries like Brazil and Chile have both been more successful in attracting foreign investment, maintaining higher levels of social spending in the contexts of stable macroeconomic conditions (WB, 2013).

Secondly, social assistance would not only be helping to eschew the expansion of social protection funded by payroll contributions, but it would also end up subsidising low wages. As commented previously, real earnings in Mexico have been falling since the first neoliberal structural adjustment measures were introduced in the 1980s. The objective has been to make the country more attractive to foreign investors, by offering a cheap labour force. In this context, social policy would end up subsidising low wages. They would be helping to keep demands for wage increases under control by raising the cash income of poor families. Even if benefits amounts are minimal and insufficient to provide an income above poverty lines, without them the economic situation of many Mexican families would be even worse given the drop in real earnings.

Thirdly, the expansion of social assistance helped to sustain the legitimacy of the programme of economic liberalisation adopted during the last decades. The introduction of social assistance programmes allowed the last governments to argue they were implementing policies in favour of the poor, but with a minimal effort. Whilst wages were left to drop and the de facto liberalisation of the labour market intensified (Brachet-Marquez and De Oliveira, 2002), governments presented programmes like *Oportunidades* as great achievements, when in fact, the resources devoted to them, and as the calculations in this thesis showed, their redistributive potential were minimal.

With the continuing fragmentation of the system, Mexico could be falling into the paradox of redistribution. Korpi and Palme (1998) showed how social policy systems based on social assistance programmes have a weaker effect on poverty and inequality because of the low levels of political support they gather. The Mexican case is even more serious. Social programmes would be dividing the population not only by income, as social assistance programmes naturally do, but more importantly, by employment status. Instead of promoting social solidarity, social policy would be blocking the prospects of collective action. The coverage of the new programmes was kept limited to low income families of earners in precarious employment, excluding not just the middle classes, but also poor families who are not considered poor enough to receive support from the state. A parallel set of programmes, also fragmented, coexists with the new programme. Given this fragmentation, no major steps towards the creation of a system with higher redistributive potential should be expected, as the own system blocks the formation of cross-class coalitions that could form to demand more and better benefits and services.

In sum, the new social assistance programmes have ended up adding a new layer to the system, reproducing the unequal levels of social protection offered by the state to Mexican families. The fragmented expansion of the system blocks the building of redistributive coalitions that could lead to a more egalitarian model of welfare. At the end, the state fails to provide adequate levels of protection to all citizens and to effectively reduce the high levels of poverty and inequality that persist in the country.

### **8.3. A Neoliberal Model**

A ‘liberal-informal’ welfare regime with a strong productivist logic, is how Barrientos (2009) has called the welfare model that has emerged in Latin America after the wave of social policy reforms started in the 1990s. There is debate as to the extent in which there is a unique regional model or in fact different model-types have appeared (Filgueira and Filgueira, 2002, Martínez Franzoni, 2008). The debate takes more relevance after the left turns of most South American countries during the last decade (Cameron and Hershberg, 2010). Nonetheless, for the case of Mexico, it would be difficult not to argue that a liberal type of social policy was adopted and consolidated by the last three governments.

Before the reforms Mexico exhibited the features of a Latin American corporatist model, with a social policy based on stratified social insurance programmes and a large informal sector, like Barrientos (2009, 2004) has characterised it. Mesa-Lago (2000) placed Mexico in the intermediate group according to its level of development of social policy, that distinguished themselves from the pioneer countries with the most advanced systems because they introduced their systems later, they had lower coverage levels and also because of their more unified social insurance systems. Filgueira (1998) defined the Mexican regime as ‘dual’ because of the inequalities that the social protection system based on social insurance programmes generated, by covering only one part of the population. Dion (2010) highlights the system’s inequalities generated by the stratification of social insurance programmes and its low coverage percentages.

All these conceptualisations share two main characteristics: i) the centrality of stratified social insurance programmes and ii) the low coverage levels of social protection. As the calculations of this thesis showed, the reforms have broken with these two central features. Mexican social policy would now resemble the liberal model of productivist logic that Barrientos outlined for Latin America (2009), with targeted social assistance programmes

gaining importance but without dismissing the social insurance component. These programmes would have diluted the ‘truncated’ nature of social protection. The social insurance and social assistance paradigms would be coexisting in Mexico, with the former still the basis but with the latter increasing its relevance, as Franco (2006) commented for the Latin American region in general. Bayon (2009) highlighted these same features of the Mexican welfare model in the twenty-first century. Nonetheless, the research conducted for this thesis revealed two elements that could be added to current characterisations of the Mexican welfare model.

First, social assistance programmes offer only minimal benefits that keep social spending at low levels. Low social spending in turn allows for taxation to be also maintained at low levels. Although personal income tax rates have increased, special conditions like the minor taxpayers’ regime open opportunities for people to pay fewer taxes, that is, in the case that they would be paying any taxes, because in practice, less than half of the population pays them. Tax avoidance would be a measure that would be compensating families for the fall in real earnings, whilst also aiding firms to keep labour costs down and increase their competitiveness. In this way, benefits of minimal amounts and value constitute a fundamental element of the welfare model.

The second element is the system’s fragmentation. In the context of a pluralist democratic regime, the fragmentation of benefits and services would permit their provision to large sectors of the population at a low cost. During the authoritarian phase of the Mexican political regime, governments could, to a large extent, afford to neglect the needs of large sectors of the population that were not considered strategic within the corporatist structure. Now that the legitimacy of the government resides in the electoral process, it becomes imperative to expand social protection to previously ignored groups. Social insurance would not be the optimal medium for the expansion because that would have an impact on labour costs. This process is outlined by Dion (2010), who also argues that as the political regime was liberalised, traditional corporatist institutions lost relevance, enabling the retrenchment of social insurance programmes. In this way, the layering of additional programmes becomes also an essential component of the welfare model.

It is not the objective of this thesis to identify the drivers of the reforms, but it is worth commenting on three factors that could prove to be crucial for the future of social protection in Mexico. First, as commented, the effect of electoral competition, which is clearly evident

on the expansion of non-contributory pensions. The programme '70 and more' was introduced in the context of the competed elections of 2006, as a response to the implementation of universal non-contributory pensions by the leftist Federal District government. Popular Health Insurance was also implemented by the Federal Government after the Federal District government had introduced a healthcare scheme of universal aspirations, although the link to electoral competition would be less clear and, as in the case of other programmes, its factors would require further research.

Esquivel et al (2011) mention that the social policy reforms did not respond to social mobilisation, but were rather designed and implemented in a top-down process by 'progressive' policymakers. Levy (2006) stresses that the introduction of Progresa (later renamed Oportunidades) did not respond to social pressures and that there were no demands for the expansion of social benefits during that time. Nonetheless, this view overlooks the fact that a few years earlier the Zapatista uprising had brought to the forefront of public debate the country's high levels of poverty and inequality. Perhaps not directly, but social mobilisation could have had an impact on the expansion of social protection. Nonetheless, the absence of strong social mobilisation behind the reforms is evident and could explain their low redistributive potential. Comparative research with other Latin American countries that have developed more generous social protection systems in the contexts of intense social mobilisation could be fruitful to fully investigate how social movements have impacted policy developments in the region.

The consolidation of a neoliberal hegemony could also explain the origins of policy reforms and why certain models were chosen. Whilst the system's expansion can be explained by electoral competition, the dismantling of some corporatist structures or the effects of social mobilisation, the question that would remain would be why, in the first place, did reformers chose thy types of reforms they did. For example, why did reformers chose a targeted approach to expand non-contributory pensions; why did they insist on introducing a pension system of individual capitalisation for public sector workers when all evidence shoes that those type of systems had great deficiencies; or why the layering of an additional healthcare insurance programme instead of a system of universal access. The consolidation of neoliberalism in Mexico is associated to the rise of the liberal technocratic elite that took control of the policy-making process since the 1980s. The question that would remain would



be how was that elite able to defeat all contestations to their neoliberal agenda within and outside government structures.

In sum, the particular features of the Mexican reforms revealed by the calculations of this study, namely minimal benefit levels and a high fragmentation, distinguish it from the orthodox ‘liberal’ model present in Anglo-Saxon countries. The Mexican model could perhaps be better labelled as ‘neoliberal’ rather than ‘liberal’. The question would be if traces of this neoliberal model can also be observed in countries that are facing pressures for the expansion of social protection by electoral competition, under contexts of strong economic liberalisation.

In the particular case of Mexico, the explanation behind the apparent compatibility of neoliberalism and pluralist democracy might be found in the sequencing of events. The liberal policy making elite that has dominated national politics for more than 20 years arrived to power before the transition to democracy, still under the authoritarian regime. This fact allowed them to draw the social policy path that the country would follow with relatively low levels of contestation. Eventually, a liberal model of social policy became hegemonic, in tune with the aggressive liberalisation of the economy. Electoral competition has not been sufficient to amend the path (Rodríguez Araujo, 2010, Teichman, 2002). Much needed research is needed on the mechanisms that enabled the consolidation of neoliberalism in Mexico, in contrast to South American countries, which seem to have taken steps towards a social-democratic model (Huber and Stephens, 2012).

#### **8.4. Concluding Remarks**

This chapter has discussed three main findings of the research. First, the reforms did increase the levels of vertical redistribution, which is what would be expected because social assistance programmes naturally redistribute income towards the poor; but on horizontal redistribution across family compositions, more support was directed towards families with older children and women in work, and on redistribution across employment profiles, the effort was eschewed towards families with earners either self-employed or employed in the informal economy.

Secondly, that two reform logics had been combined to design the reforms. On one side, a ‘social investment’ or productivist logic that had been pointed out for the Latin American

region in general, and that in the case of Mexico was made evident by the emphasis on programmes that aimed to support the education of children and the employment of women, with the objective of enabling poor families to overcome their situation through labour market participation; on the other side, a residual logic that limited the expansion of social protection to the introduction of social assistance programmes. The result of this combination was a limited redistributive potential, which neglected the wellbeing of families with small children and offered minimal benefits that were not sufficient to raise low income families above poverty lines.

Thirdly, whilst the reforms broke with the benefit system's 'truncated' nature, they did so by layering additional programmes, creating a fragmented policy architecture that offered unequal levels of protection depending on the earners' employment profile. The system offered different benefit types and levels to different population groups, administered by different government agencies. Such fragmentation blocked prospects for collective action to demand a more comprehensive social protection, resulting in more fragmentation and continuing low benefit levels.

Lastly, the chapter outlined the welfare model that emerged from the reform process. The argument was made that more than a 'liberal' model, the Mexican social protection system would better be labelled a 'neoliberal' model because of its close complementarities with the neoliberal economic strategy adopted during the last decades. Given the pressures generated by electoral competition, it would be expected that the system continues its expansion, but with limited redistributive potential because of constraints of the 'neoliberal' model. Low levels of social mobilisation and well entrenched neoliberal ideas in the state's structures make it difficult to expect any major changes in the model. Social policy will continue to fail to fight the country's high levels of poverty and inequality.

## **9. Conclusions**

### **9.1. Introduction**

The thesis revealed the redistributive potential of changes in the Mexican tax/benefit system between 1994 and 2012. The research consisted on the modelling of the potential effects of social policy on households. Empirical findings revealed the emergence of a neoliberal social welfare model with low redistributive potential, based on a fragmented architecture and minimal benefits for poor families in the informal economy. The present chapter offers the answer to the research questions and concludes the thesis by identifying major policy implications and future avenues for research.

The chapter is divided in seven sections. The first one briefly summarises each chapter of the thesis. The next section provides the answer to the main research question and the three sub-questions that guided the study. The following two sections describe the study's limitations and highlight its main contributions. The next one describes some major policy implications, followed by a section that identifies possible avenues to continue the research on Mexican social policy. The chapter concludes by offering a number of final reflections.

### **9.2. Thesis Summary**

The first three chapters of the thesis offered the introduction to the research, the theoretical framework and the literature review. The main concepts relevant for the study of redistribution and social policy were presented, as well as the narrative on the history of social policy in Latin America and more specifically on Mexico. The literature review also included main theoretical insights into recent policy changes in both the region and the country, and basic socio-demographic and labour market data relevant for the design of the research. The fourth chapter described the methodological approach based on the 'model families' technique, presented the research questions that guided the study, and explained the selection process of model families and the components of the tax/benefit system.

The next three chapters presented the empirical findings. Chapter 5 showed that changes in the structure of social insurance contributions and income tax reform had a negative effect on the income of families with earners employed in the formal economy, except those at the bottom of the income scale, which benefited from higher tax subsidies, whilst the formal self-

employed would benefit from the minor taxpayers regime. Chapter 6 revealed that the extent to which lack of social insurance coverage would leave families unprotected, especially in the presence of pregnant women in work, and how the design of family transfers prioritise families with children in secondary and high school. In addition, the reform of social insurance pensions would severely harm pensioners except for those with previous low earnings, and social assistance pensions would have a minimal effect because of their low amount. Chapter 7 highlighted the importance of the introduction of healthcare for families without social insurance coverage and the relevance of childcare within the benefit system, whilst the analysis of housing programmes revealed the inequalities of the system and the limited potential of subsidies to improve housing standards of low income population.

Chapter 8 provided a discussion of the research's main findings and linked them to the literature on social policy. Three main points were discussed, the increase in levels of vertical redistribution and the changes in levels of horizontal redistribution triggered by the reforms; the 'productivist' and 'residual' logics that drove the reform process and shaped the present architecture of the system; and the expansion of social protection in a fragmented and unequal manner. The argument was made that Mexican social policy should better be defined as 'neoliberal', since it represents a fundamental piece of the export-oriented growth model by subsidising low wages and private investment.

### **9.3. Answering the Research Questions**

The research was guided by one main question and three related sub-questions. The main research question was 'How did the fiscal and social policy reforms undertaken in Mexico between 1994 and 2012 modify the redistributive potential of the tax/benefit system? The three specific questions were the following:

1. *How were the changes in the system's rules expected to benefit or affect households from different sectors of the population?* In other words, who were the winners and losers of the reforms? Which were the family types most affected or benefited by the reforms?
2. *How were changes or continuities in the redistributive potential of the tax/benefit system obtained?* In other words, what specific changes in the system's rules benefit or affect households from different sectors of the population? Which programmes affected or benefited different family types?

3. *How can the emerging architecture of the tax/benefit system be characterised?* In other words, what are the main features of the social protection institutional assembly after the reforms?

The simulation exercise involved five different household compositions, nine different levels of income and five different employment profiles – a total of 225 combinations. Taxes and benefits were calculated for each combination in according the rules in force in 1994 and 2012. Results were compared between both years and across different family types in each year.

In relation to the main research question, How did the fiscal and social policy reforms undertaken in Mexico between 1994 and 2012 modify the redistributive potential of the tax/benefit system?, the study found that the reforms had the three major effects on the system's redistributive potential:

- Increase of the vertical redistributive potential from high to low income families. The system in 1994 was vertically redistributive, but the reforms increased that potential.
- Across family compositions, introduction of redistributive logic towards low income families with children and families with women in work. In 1994, the system did not take into account family composition to establish the payment of taxes, determine access to benefits and/or estimate benefit levels.
- Across employment profiles, introduction of redistributive logic towards low income families of earners who were self-employed or employed in the informal economy. In 1994, the system's redistributive potential was directed towards low income families with earners employed in the formal economy; the reforms introduced redistribution towards low income families with no access to social insurance, and by 2012, redistributive levels would be expected to be higher for the latter than for the former.
- Also across employment profiles, higher levels of redistribution towards low income pensioners of the system for public sector workers (i.e. ISSSTE).

The answer to the first specific research question, How were the changes in the system's rules expected to benefit or affect households from different sectors of the population?, allows further expansion of the answer to the main question. The winners and losers of the reform process were the following:

- By far, the higher increases in net gains after taxes and benefits would have been obtained by low income family types with self-employed earners or employed in the informal economy; hence these would be the major winners of the reform process.
- Among the latter, families with older children, namely in higher school grades, and with working families would have benefited the most.
- If only changes in taxes and cash benefits are considered, no other family types would have benefited from the reforms in a significant way. If changes in the value of benefits in-kind are added, low income families of public sector employees also register important improvements.
- High-income families with earners employed in the formal economy would be the main losers of the reforms. If only cash benefits are considered, middle-income families of these employment profiles also register losses, but after benefits in-kind, only the former end up losing out.
- The other group of major losers would be middle and high income retired people previously employed in the formal private sector.

The answer to the second specific question, How were changes in the redistributive potential of the tax/benefit system obtained?, permits the identification of the policy changes that had the strongest impact on the system's redistributive potential. On taxes and cash benefits, the policy changes that benefited or affected major winners and losers were the following:

- The introduction of the *Oportunidades* programme had the strongest impact on the levels of redistribution towards low income families with no social insurance coverage. The impact increased for families with older children in higher school grades.
- Increases to tax subsidies had a minor positive effect on low income families of formal sector employees.
- Reduction of income tax rates that result from the introduction of the minor tax-payers regime has also a minor positive effect on middle and high income families of self-employed earners.
- Changes of social insurance contributions affected families of public sector employees.
- Families of high-income formal sector employees were affected by income tax reform; although there is one caveat regarding the introduction of deductions on

private welfare spending. Even at the low levels that they were calculated here, the amount that a family earning 25 times the minimum wage would get back from deductions would surpass the amount that a family earning one minimum wage would receive from tax subsidies. Tax deductions might not represent a significant proportion of original earnings for high income families, but they do ameliorate the increase in income tax rates.

- Pension reform and the adoption of the individualisation of pension funds would affect middle and high income pensioners of the system for private sector employees (i.e. IMSS).

On the side of benefits in-kind, the changes that would be expected to have the major effects were:

- The introduction Popular Health Insurance healthcare would have a strong impact on low and middle income families with no social insurance coverage.
- The introduction of childcare services for women in work with no social insurance coverage would have a high strong effect on low income families of women of that employment profile.
- Increases on healthcare spending for public sector employees show a strong impact on low and middle income families of that employment profile.

The answer to the third specific question, How can the emerging architecture of the tax/benefit system be characterised?, wraps up the research's findings and conclusions. Four salient features can be identified in the new policy architecture after the calculations of its redistributive potential.

- The architecture shows a mix of the traditional social insurance programmes and a group of emerging social assistance programmes.
- The system has a low redistributive potential. Even if vertical redistribution towards low income families was increased, benefit levels remain low and insufficient to raise families above poverty lines. Even if income tax rates were increased, tax revenue remains at remain low levels because of conditions like the minor taxpayers' regime on one side, and the large informal economy on the other side. At the same time, benefit amounts remain low and the cash support offered by programmes like '*Oportunidades*' and '*70 and more*' are not enough to raise per capita income above

the official minimum poverty lines set by the own government. In other words, benefits are not enough to even provide an income that would allow families to purchase a food basket to meet minimum nutrition requirements.

- Policy changes reflect the combination of two logics. On one side, a ‘productivist’ or ‘social investment’ strategy that puts the emphasis on programmes that aim to enable people to overcome poverty through labour market participation. On the other side, a residual logic that considers programmes targeted at low income population the only legitimate types of interventions. Because these logics are prioritised, many families that are still poor but not poor enough do not meet the criteria to qualify for social assistance and are left with no state support. For example, levels of support for families with small children are lower than for families with older children and stop at extremely low earnings levels; in addition, programmes that offer protection to the elderly, disabled or the unemployed are extremely limited or simply inexistent.
- The reforms broke with the system’s ‘truncated’ nature, but created a fragmented architecture that offers unequal levels of protection to different sectors of the population. Social protection was already fragmented because of the stratified social insurance programmes. The reforms reproduced that fragmentation across different segments of the labour market, not only because of the natural segmentation that social assistance programmes produce between recipients and non-recipients, but also by the expansion of social protection through the layering of programmes along the traditional social insurance programmes. Moreover, the emerging architecture offers unequal benefit levels to different population groups. The inequality was present in all policy areas. The fragmentation has two outcomes: i) it reproduces the inequality of Mexican society, and ii) it blocks the formation of collective action to demand more equal and effective benefit system.
- Social protection serves as a complement to the neoliberal economic strategy pursued by the last three governments. Low labour costs are considered a necessary condition for the functioning of the export-oriented growth model. The emerging architecture would be contributing in three ways to the implementation of the model: i) it helps to maintain low wages by offering a supplement to families’ earnings, ii) it allows the expansion of social protection without increasing payroll contributions, and iii) it sustains the legitimacy of neoliberalism in a context of an competitive electoral



system, by allowing governments to argue they are combating poverty but doing so at a minimal cost.

#### **9.4. Contributions to the Literature**

The thesis has attempted to make a modest but important contribution to the literature on Mexican social policy by demonstrating the effects of changes in the tax/benefit system at the household level. The contributions can be ordered in three groups. First, at an empirical level, it provided a comprehensive assessment of the reform process at the micro level. Previous studies have analysed social policy changes but not their redistributive effects including tax policy (Dion, 2010, Bayón, 2009). Scott has estimated levels of redistribution of taxes and social spending across income deciles but not levels of horizontal redistribution and only from 2006 to 2010 (Scott, 2013, Esquivel et al., 2011). This thesis offered a complete analysis of the transformation of social protection in Mexico since the mid-1990s, comparing degrees of redistribution, i.e. net gains/losses after taxes and benefits at the household level before and after the reforms, producing an assessment of the potential impact of the reform process on family income. In addition, the study covers all social policy areas, including housing, which is not analysed in previous studies.

It was shown that the reform process would have increased income of groups of the population that had been previously neglected by the social protection system, namely families with no social insurance, but that the new benefits were concentrated on low income population and because of the logics followed in their design, were ineffective to combat poverty and inequality.

Secondly, the thesis makes a contribution at the methodological level, by applying the micro-simulation logic to the study of social protection in Mexico. As commented before, whilst micro-simulation models of tax/benefit systems have been used to analyse the impact of public policies in other regions for some time, in Latin America their development is only beginning (Lopez Calva and Urzua, 2011). This thesis would represent an initial attempt to estimate the potential impact of tax and policy changes by modelling their effects at the household level. The application of the ‘model families’ approach allowed the identification of the consequences that policy changes had for the welfare of families of different population groups. No similar research project of Mexican social policy was found when the literature search was conducted.

Contrary to previous work, like Scott's (Scott, 2013, Esquivel et al., 2011), using the 'model families' approach permitted the identification of the changes in the vertical and horizontal redistributive potential of the policy architecture. In addition, the method enabled a comparison of the effects of the principal social programmes across two moments in time for which no data from national surveys would be available.

Finally, the thesis contributes to current theories of Latin American social policy at the theoretical level, by complementing current characterisations of the Mexican social protection architecture, introduced and consolidated during the twenty-first century. Previous studies have identified the liberal features of the reforms in Latin America and Mexico (Dion, 2010, Bayón, 2009), whilst Barrientos (2009) highlighted their productivist approach too. This thesis adds to these current conceptualisations of the welfare model. It quantified the effects on family income of the application of the residual and productivist logics to the design of policy changes. By estimating the potential combined effects of taxes and benefits and their complementarities with the functioning of the export-oriented growth model, the thesis revealed the strong link that has emerged between social protection policies and the neoliberal economic strategy applied by the last governments.

The calculations revealed how the new benefits serve as a supplement to the low earnings of poor population and enabled the expansion of social protection without increasing payroll taxes. Neoliberalism requires low labour costs to gain competitiveness, hence the low taxes and minimal benefits established in Mexico. The country would represent a paradigmatic case of a neoliberal social policy in the context of a pluralist democracy.

## **9.5. Limitations of the Research**

Besides the limitations imposed by the methodological approach, already discussed in chapter 4, there were some aspects of the reform process that were not possible to capture in this thesis. First, the scope of the research was on federal policies as they would be delivered in the Federal District, but social protection has also been expanded at the subnational level, property taxes are paid at that level as well, and there may be variations in the access to benefits and services throughout the country, but including these variables would have implied conducting a different comparative research project across states.

Secondly, except for education, the calculations did not consider different usage rates of welfare services and levels of private spending. It was assumed that all families received the same services and spent the same proportion of their income on healthcare, but in practice there would be variations in usage rate and spending among family types. For example, high income families would tend to make less use of public healthcare, whether delivered by social insurance or Popular Health Insurance. Micro-simulation models utilising empirical data could better capture these variables.

The research did not evaluate the quality of services and implementation of programmes, or specific criteria for the delivery of benefits that were not considered, like the conditions that families must meet to remain in the *Oportunidades* programme, which have been proved to have some negative effects that non-beneficiary families would not have (Damian, 2006). In-depth qualitative research could assess these variables. A final point that was not considered was the differences in the minimum pension age of pension programmes; life-cycle simulation could be useful to assess such differences. Nonetheless, in spite of all these, the thesis does provide a comprehensive assessment of the social protection architecture's redistributive potential and reveals major winners and losers of the reform process, and it constitutes an original exercise in the country by the way it captures in such detail the redistributive potential of the reforms.

## **9.6. Policy Implications**

Given its limitations, the thesis identified several relevant policy implications for the improvement of the tax/benefit system redistributive potential. The research has shown how the architecture of the system fails to adequately address within its redistributive rationale the key challenge of offering comprehensive and equitable level of protection, because of its productivist/residual logic and its high degree of fragmentation.

Morel et al. (2012) emphasise that the presence of an adequate income support system to combat poverty and inequality is what distinguishes the 'social investment' strategy from neoliberalism. In Mexico, the productivist approach has been incorporated without building that type of support system. The same authors and others (Nolan, 2013) acknowledge the adopting the 'social investment' strategy represents the risk of sacrificing current poverty levels with the expectation that they will be reduced in the future. This is precisely what has been happening in Mexico, with the aggravation that even if people attempt to lift themselves

out of poverty by seeking opportunities in the labour market, the low wages imposed by the neoliberal model would not allow them to do so.

A first step towards a social policy that offers real protection to Mexican families would be to prioritise the construction of a universal income support system. Universalisation can be achieved by expanding the social insurance system. The legislation can be reformed to mandate the obligatory insurance of groups of workers not currently considered. This would offer the entire working population comprehensive income protection against risks like old-age, illness, disability or maternity. The latter is especially important because currently the lack of social insurance coverage can represent a reduction of close to 30 per cent of annual income for women in work who give birth. The universalisation of social insurance, a goal originally sought with the 1973 reform, would be severely undermined with the system's current fragmentation and inequality.

Furthermore, the work towards a system of social welfare in Mexico that will be more socially just, more economically equitable and more administratively efficient needs to meet the challenges of the following set of reforms:

- On old-age pensions, the inequalities between social insurance and social assistance programmes need to be eliminated and the present system of private individual accounts must be reversed to reduce administration fees and increase returns. A three tier system could be created in its place. A basic universal pension to all citizens above the pension age, a second tier of pay-as-you-go pensions, and a third tier of individual capitalisation, could be its basic architectures, preferably with only one administrator under state control.
- Family policy needs to lose its strong productivist and residual components. Benefit amounts should guarantee a minimum income that will at least allows all families reach the lowest poverty line. Benefits should be paid for each child regardless of their age or school grade, to make sure that all families receive adequate support. Targeting should be replaced by an approach that offers benefits to all or at least the majority of families, as the proposal of 'basic universalism' recommends (De Ferranti et al., 2003). It would be convenient to integrate family policy and social insurance benefits under an integrated system, which would not only reduce administrative inefficiencies but also help to build up levels of social solidarity.

- Healthcare programmes, as well as childcare, must also be unified under the same systems, to reduce fragmentation and inequalities. As it has been recommended (Laurell, 2007), the country needs to implement a universal healthcare system, accessed as a right of citizenship, free at the point of service. Regarding childcare, an option could be to unify social insurance and social assistance services under one system that could be accessed by any women in work, subsidised by the state.
- On housing, as more people join social insurance, they will have the opportunity to contribute to their housing fund. State intervention should be enhanced to reduce high costs generated by the marketization of public housing programmes. To improve housing conditions of people who do not have a housing fund, income support to pay rents could be incorporated, in addition to keeping subsidies for self-built solutions,.

The question that remains is how to fund increases to social spending that the creation of a universal income protection system would represent. Levy (2012, 2008) has put forward a proposal to break with the current fragmentation by introducing a universal social protection system funded by increases to consumption taxes. This would not be an optimal option; not only because those types of taxes are highly regressive, but because real wages have fallen dramatically in Mexico, so any increase in consumption taxes will hamper even more the low earnings of poor families.

Income protection could still be funded by social insurance contributions. Available resources for the social insurance system would increase as more people are insured. But family policy, healthcare, childcare and other benefits could be funded by increasing the income tax base. Special conditions like the minor taxpayers regime for the self-employed need to be eliminated, as they mostly benefit high-income population. There is scope to increase marginal rates at the top of the income scale. Among OECD countries, Mexico has the lowest collection rates of income tax, 5.2 per cent of GDP compared to an average of 11.3 per cent in 2010 (OECD, 2012), whilst it is also the most unequal, average income of the top decile represents 27 times the average income of the first decile (OECD, 2011).

Above all, what is required is the dismissal of the neoliberal economic model and the promotion of domestic markets. An increase to the minimum wage could be a starting point. It is not suggested that wages rise to the same levels of Mexico's North American trade partners. But given their current low levels, there is scope for increases. This measure has

proven to be an effective tool to fight poverty in other Latin American countries like Brazil (Filgueira and Reygadas, 2010). Gradual increases could be introduced to reduce inflationary pressures. This option would help to raise living standards without immediate increases of benefit amounts and social spending. The growth of internal markets would be promoted as families increase their consumption levels.

All these measures could represent steps towards a more just and equal social protection, but without major political changes, any expectations for social reforms should be kept low. Yet, the presence of a pluralist political system generates some hope. Electoral competition has helped to expand social protection to groups of the population previously excluded. Perhaps its further consolidation could open spaces for social mobilisation, in spite of the fragmentation of the social protection system.

## **9.7. Avenues for Future Research**

Several possible avenues for future research have been identified throughout the thesis. The natural next step would be to update the research with policy changes introduced after 2012. The transformation of Mexican social protection continues at an accelerated pace. Five major changes have been introduced during the last year. Just at the national level, recent changes include the creation of the programme ‘Crusade against Hunger’, income tax reform, the creation of an unemployment insurance programme, the expansion of non-contributory pensions and the reform of the *Oportunidades* programme. In theory, these reforms may appear as an extension of social protection, but in practice they could be masking the consolidation of the neoliberal model. Further research is needed to estimate their impact of at the household level.

Another step that could be taken would be to continue the research on the Mexican tax/benefit system with the construction of micro-simulation models. As mentioned, these models have been in operation for a considerable time in other region (e.g. EUROMOD) In Latin America, their development is still incipient. They would allow estimating the effects of tax and social policies after their implementation, hence producing an evaluation of how the system really works, which could be compared on research based on ‘model families’ to explore distances between policy design and implementation. One advantage of micro-simulation models would be that they could cover a wider range of family types. Two disadvantages would be that they could not model effects for long time spans or for all

benefits and services as in these thesis because of the lack of available data. Further inclusion of variables associated to the payment of taxes and the provision of benefits and services in national surveys could solve the latter problem in the future.

Life-cycle simulation models, like the one developed by Evans and Williams (2009) for the United Kingdom, could prove to be useful tools for the assessment of redistribution in Mexico. They could be especially valuable to estimate the effects of the social insurance benefits that persons receive during their lives and would allow the modelling of differences in eligibility criteria like the pension age of different pension programmes. One problem would be the lack of data to simulate historical effects, but they could be applied in the future studies if the variables are available in national surveys.

Social protection has also been transformed at the subnational level. During the hegemonic party regime, social policy interventions at this level were practically inexistent. As multi-party electoral democracy has settled in the country and parties in local governments have alternated, activity in the social policy field at the state and municipal levels has rapidly expanded. The pioneer was the Federal District government, with the introduction of the programme of universal non-contributory old-age pensions in the early 2000s, several programmes have been introduced since then and other states have followed. In addition, some taxes like property taxes are determined and collected by local governments. The redistributive effects of tax/benefit systems mounted by state governments could be assessed by applying ‘model families’.

Another step could be to embark on cross-national comparative research not only with other Latin American countries, but also with countries of other regions where social protection has also been expanded in recent years, like Southern Africa and East and Southeast Asia. Given the wide variety of social protection tools that policy-makers have at their disposition and the differences in the reform models observable in the design of reforms in different countries, it is necessary to identify which alternatives have the strongest potential of reducing levels of poverty and inequality. Applying ‘model families’ to cross-national research in these countries, as it has been applied in countries with advanced welfare states (Bradshaw and Tokoro, 2014, Eardly et al., 1996, Bradshaw et al., 1993), would reveal the reform models with the greatest probabilities of achieving success.

In-depth qualitative research would be necessary to assess the actual access, conditions and quality of benefits and services, and hence to investigate their real impact on the welfare of families. In this respect, the ethnographic research of Escobar and Gonzalez de la Rocha (2004) on the effects of the Oportunidades programme has been highly valuable in revealing deficiencies with its design and implementation. Similar research must be conducted on all social programmes, but the areas that require immediate attention are the new social assistance programmes, like '70 and more' and Popular Health Insurance, where the government reports high coverage percentages and spending amounts, and which indeed seem to have a positive impact on vertical redistribution, as this study has shown, but yet reports of serious deficiencies with their operation are constantly emerging.

It is also necessary to further investigate the political economy of the emergence and consolidation of the neoliberal social protection model. Dion (2010) provides an unprecedented and complete explanation of the drivers of the origins and initial development of social insurance in Mexico, but her analysis of the recent reform process has been criticised for lacking the same level of profoundness (Rath, 2014, Middlebrook, 2011). Chapter 7 of the thesis suggested some variables that would seem to have a strong impact in the policy changes and continuities adopted during the last decades. Applying different institutional and ideational approaches could yield a better understanding of why the Mexican tax/benefit systems has evolved with such a low redistributive potential, and what are the political, social and economic conditions that could be modified to promote the institutional and policy changes necessary to construct a more just and equal system.

Finally, more research might be needed on the dynamics between the economic model, social policy and the informal economy. Indeed informality is commonly cited as one of the obstacles for the development of Latin American countries. As this thesis has shown, new social benefits subsidise informality and would in fact end up reproducing it. But further research is needed on additional factors that have created the country's large informal economy. Dion (2010) suggests that in the context of an open economy, the government has accepted and promoted the informalisation of the labour market to pursue economic growth. The author argues that by being unable to combat corruption, tax evasion and precarious employment, the government increases the competitiveness of the economy based on low labour costs. This process was discussed in chapter 7 of the thesis. Still, the question would be how precisely governments actually carry out those measures, to what extent they respond



to intentional actions or economic constraints, and institutional or cultural legacies. A better understanding of the determinants of informality could generate policy alternatives to combat it even under a liberalised economy.

## **9.8. Concluding Remarks**

The research conducted for this thesis has revealed the productivist, residual and fragmented expansion of the Mexican social protection system. Levels of vertical redistribution have been increased, which is what would be expected from the introduction of social assistance programmes. But the analysis of horizontal redistribution showed that the emphasis has been put on the welfare of family types that are deemed to require support for the incorporation of their members to labour markets, since this is seen as the main mechanism for families to improve their living standards through their own effort. Benefit levels of new programmes are minimal since their main objective is not to combat poverty and inequality, but rather to enable the incorporation of people into the labour market, hence are not sufficient to raise living standards of poor families above minimum poverty thresholds. Because of their residual nature, the new programmes exclude large number of low income families that do not qualify for them but who would still need support from the government to improve their living standards.

Across employment status, redistribution has been directed towards families of low income workers that lack social insurance, who tend to be in precarious employment. The tax/benefit system ends up reproducing informality. Levels of support for families with earners in formal employment have not been increased, and as was the case of pensions, have actually been reduced for the majority of them. Labour market attachment still defines access to benefits and segments the population.

The final result is a fragmented system that offers unequal levels of protection to different sectors of the population, who receive different benefit levels, from different programmes administered by different government agencies. Even if the 'truncated' nature of the social protection has been broken, the expansion has ended up reproducing the segmentation of the population. Instead of combating inequality, the social policy reinforces it.

The system serves as a complement to the neoliberal economic model. Fiscal and social policy changes have contributed to the low labour costs required to increase the

competitiveness of the country in the context of a highly liberalised economy. New social benefits supplement low wages and offer an alternative to the expansion of social protection without funding from payroll taxes.

Interestingly, these reforms also took place during the period of the consolidation of a pluralist democratic regime in Mexico. Indeed, it might be argued that neoliberalism was the corollary of pluralist democratic politics. However, correlation should not be confused with causation. So what in fact should be argued is that contrary to the post war political experience in Europe where a process of democratising capitalism resulted in the creation of extensive welfare states, in Mexico the process of democratic consolidation in Mexico took place amidst a neoliberal elite consensus. The social policy agenda was captured by neoliberal priorities and rationales that framed the direction of reforms, ensuring that alternative policy options were ‘filtered out’. At the end only those that were compatible with the neo-liberal consensus were considered, like the social investment perspective.

The prospects for the transition towards a more just and equal social protection are not optimistic. No expansion of coverage of social insurance programmes that offer integral protection should be expected. Low benefit levels that are not tied to workers contributions would create disincentives for the expansion of social insurance coverage. Feedback effects would generate obstacles to the unification of the system and it should be expected that the segmentation becomes more rigid.

None of the reforms introduced after 2012 break with the productivist/residual logic. They represent more residual benefits, like the ‘Crusade against Hunger’, more social assistance programmes like non-contributory pensions to compensate for the retrenchment of social insurance pensions; more productivist programmes that are ineffective to combat poverty, like the expansion of Oportunidades; and the only reform that would appear to extend protection like the unemployment insurance programme, does not do that because it is funded by the retrenchment of housing programmes.

Mexico is one among the few Latin American countries where poverty and inequality have not been reduced during the twenty-first century (UNDP, 2014). As this thesis has shown, the social protection architecture that has been erected in recent years represents one of the reasons for these failures. The fragmentation of Mexican society is reinforced by the tax/benefit system and blocks the formation of redistributive coalitions that could demand a

system of better and more equal benefits and services. Unless political change is promoted, it is unlikely that any significant progress will be made in the near future towards the construction of a more just and equal society.

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